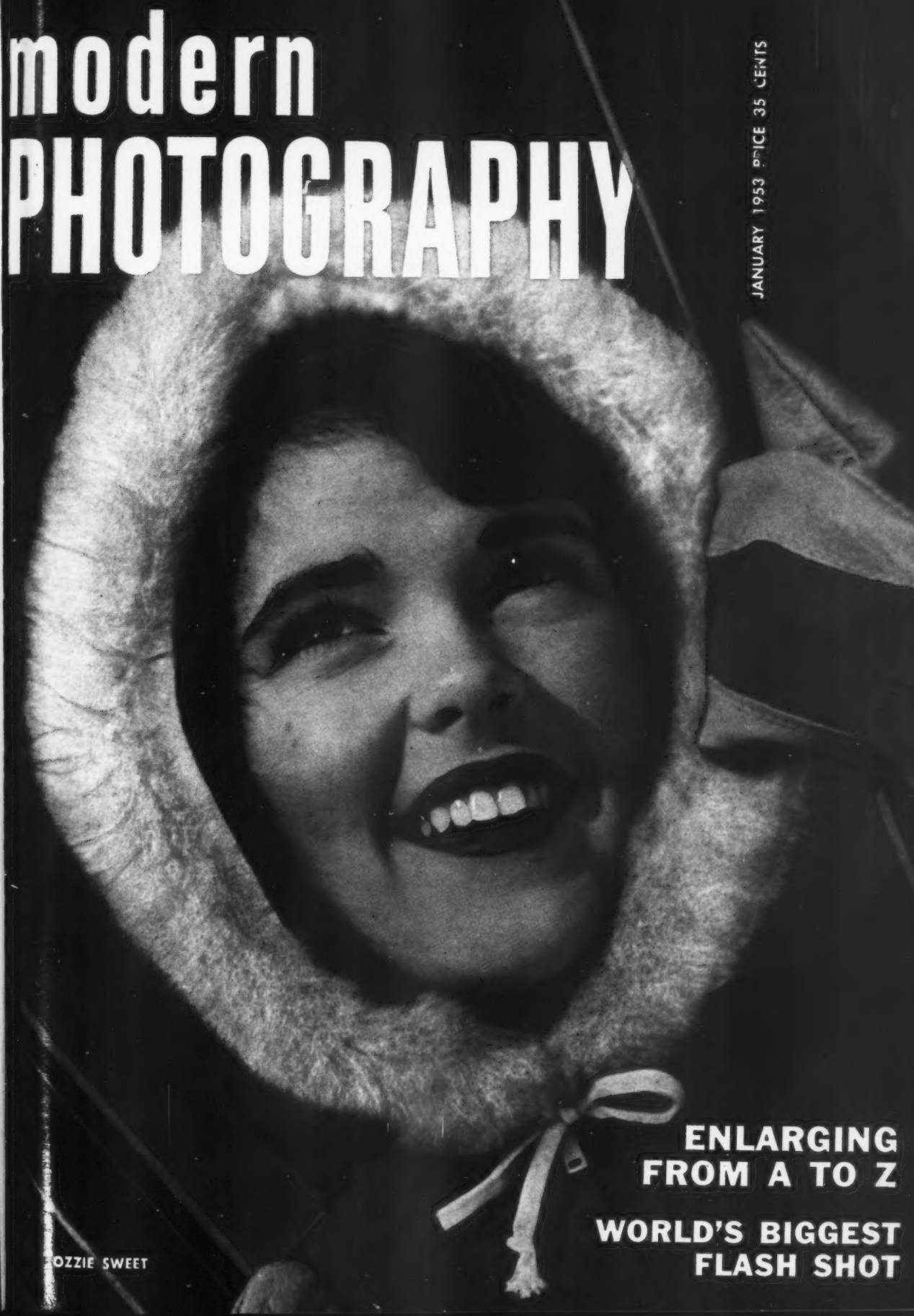


modern PHOTOGRAPHY



JANUARY 1953 PRICE 35 CENTS

**ENLARGING
FROM A TO Z**

**WORLD'S BIGGEST
FLASH SHOT**

MOZZIE SWEET

R v. 17 1953

You Can Get the Kind of Prints you Want with Ansco Cykora Paper!



Don't think for a minute that you're limiting yourself to a narrow range of print possibilities when you make Ansco Cykora the "standard" paper in your darkroom.

Rather, your increased familiarity with Cykora will give you new freedom in getting exactly the qualities you want in your finished prints!

That's partly because Cykora comes in a good selection of surfaces, ranging from the textured Kashmir to the popular Cykora Glossy which are all available in evenly spaced contrast grades that match most negatives. But most of all, it's because Cykora's rich emulsion gives you unusual exposure

development latitude, and is readily responsive to various developers and toners.

For example, Cykora yields tones of pleasing warmth when developed in Ansco Ardol, while Vividol developer produces stronger, more neutral blacks. Both of these Ansco developers are laboratory-packaged for your convenience.

Remember, the more familiar you become with Ansco Cykora, the happier you'll be with your prints!

ANSCO, Binghamton, N. Y. A Division of General Aniline & Film Corporation. "From Research to Reality."

Ask for
ANSCO
CYKORA
PAPER

GE



How to give 60 EXCITING SECONDS ON CHRISTMAS MORNING ...and a lifetime of picture-taking pleasure

When a man discovers a Polaroid® Land Camera among his gifts, all other presents wait! He takes it from its box, examines it with mounting excitement. He snaps the shutter... and 60 seconds later shows the family a finished picture — a Christmas picture for all to enjoy on *Christmas morning*.

That's only the beginning of a lifetime of picture-making pleasure. He'll use his Polaroid Camera constantly for travel pictures, party snaps, family celebrations, portraits, pictures for his business or pro-

fession. He'll take better pictures, because seeing results on the spot helps him get the picture just right. No disappointments, no waiting and wondering "how it will come out." The picture is big, too — $3\frac{1}{4} \times 4\frac{1}{4}$ " in brilliant black and white. A whisk of the print coater (packed with every picture roll) gives it lasting lustre and protection.

The Polaroid Camera is the gift for that very special name on your Christmas list. See it at your photo dealer's now, to make sure of delivery before Christmas.

NOW! TWO FINE POLAROID CAMERAS

The Model 95 is designed for those who want an easy-to-operate, inexpensive camera for perfect snapshots indoors or out. More than 50,000,000 pictures have been taken with it. For those who like the greater versatility of a deluxe camera, there's the sensational new Pathfinder model with fast $f/4.5$ lens, high-speed shutter, coupled range-finder and many other refinements. Ideal for pictures in poor light... for fast-action shots. See them both — at your dealer's.

If you would like this thrill for yourself... start hinting now

Model 95



POLAROID *Land* CAMERAS



Pathfinder
Model 110



here's a real
HOT offer!

Send us your transparencies . . .
we will make them into the most
brilliant, lifelike

COLOR PRINTS..

for as little as 20¢ each!

Bring back your fondest memories in vividly life-like, full **COLOR PRINTS** . . . made from your favorite transparencies.

Rush any size transparency to us . . . our highly skilled craftsmen insure you the best possible reproduction; the latest electronic equipment even compensates for over and under exposures.

WALLET SIZE

20¢ each

2½ x 3½ each.....	.30
3½ x 3½ each.....	.40
3½ x 4 each.....	.50
4 x 5 each.....	.65
5 x 7 each.....	1.25
8 x 10 each.....	2.50
11 x 14 each.....	4.95
16 x 20 each.....	10.00

35 MM COLOR DUPLICATES..... .25

ANSCO and EKTACHROME
color rolls developed

\$1.00
each

WRITE

LIFE
Color
LABS

All orders are returned
by first class mail insured

No C.O.D. orders, please
Minimum order \$1.00

Dept. M-1, 204 Washington Avenue • Albany, New York

WHY GUESS WHICH FILTER CORRECTS WHAT LIGHT?

WHEN A HARRISON COLOR ATTACHMENT READS DIRECTLY IN CORRECTION FILTERS!

... and shows you exactly which one to use for every picture

The only requirement is a HARRISON COLOR ATTACHMENT for either WESTON MASTER or your G.E.-DW exposure meter — whichever you happen to own.

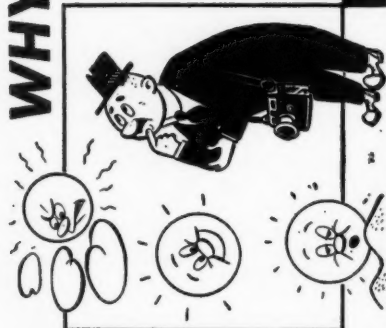
Write for your Free Booklet on the simple story of COLOR CONTROL. . . Please specify which exposure meter you have.

Nothing complicated. No calculations to make. You simply cannot go wrong!



There is a Harrison Color Attachment for your G.E.-DW Exposure Meter DW-48, DW-58 or DW-68

There is a Harrison Color Attachment for your Weston Master Exposure Meter (Universal Type, Model 735)



HARRISON & HARRISON 8363 Santa Monica Blvd. Hollywood 38, California OPTICAL ENGINEERS

modern PHOTOGRAPHY

Combined with Minicam Photography

JANUARY 1953

VOL. 17, NO. 1

articles

- 38 FOURTEEN WAYS TO PRINT A NEGATIVE.....by Robert Rolofson, Jr.
- 42 E. A. HEINIGER: SWISS PHOTOGRAPHER IS A MASTER OF PRECISION.....by Stanley H. Brown
- 50 TRY COLOR PORTRAITS OUTDOORS.....by Ozzie Sweet
- 52 HOW THEY SHOT THE WORLD'S BIGGEST FLASH PICTURE.....by Cora Alsberg
- 54 ENLARGING FROM A TO Z: FIRST IN A SERIES COVERING EVERY ASPECT OF PRINT MAKING.....by F. F. Pype
- 60 PERSONALIZE YOUR PORTRAITS: A TALENTED YOUNG PHOTOGRAPHER SHOWS HOW.....by Herman Leonard
- 66 H. FOX TALBOT, ESQ.: PART TWO IN A BIOGRAPHICAL SERIES.....by Beaumont Newhall
- 68 SIMPLE TECHNIQUES FOR COLOR STILL LIVES.....by Anthony Guyther
- 72 PROBLEMS IN STEREO PORTRAITS.....by Bart Brooks
- 92 SINGLE POWDER DEVELOPERS: A NEW ADVANCE.....by Lloyd Varden
- 98 "I TRIED IT MYSELF": PRIZE PICTURES FROM OUR READERS

movie section

- 79 DR. CINEMA SAYS: SIMPLIFYING YOUR EDITING JOB CAN MAKE IT ALMOST PAINLESS
- 80 CHAPLIN: THE BEST OF THE AMATEURS.....by Herbert Keppler
- 86 CASHING IN ON 16MM MOVIES.....by George Laycock

departments

- 10 THE LAST WORD: LETTERS FROM OUR READERS
- 12 COFFEE BREAK WITH THE EDITORS
- 21 BEHIND THE SCENES: NEWS OF THE PHOTO INDUSTRY
- 22 NEW PRODUCTS
- 36 SALON CALENDAR
- 74 THE CAMERA CLUBS.....by Mabel Scacheri
- 92 WHAT'S AHEAD? SINGLE POWDER DEVELOPERS.....by Lloyd Varden
- 98 "I TRIED IT MYSELF": PRIZE PICTURES FROM OUR READERS
- 114 NEW PHOTO BOOKS

EVERETT GELLERT, *Publisher* AUGUSTUS WOLFMAN, *Editor-in-Chief*
 JESSE C. FISHEL, *Gen. Sales Mgr.* MARTIN E. SIEGEL, *Business Manager*
 ROBERT DORIN, *Advtg. Mgr.* PHYLLIS SCHNEIDER, *Circ. Mgr.*

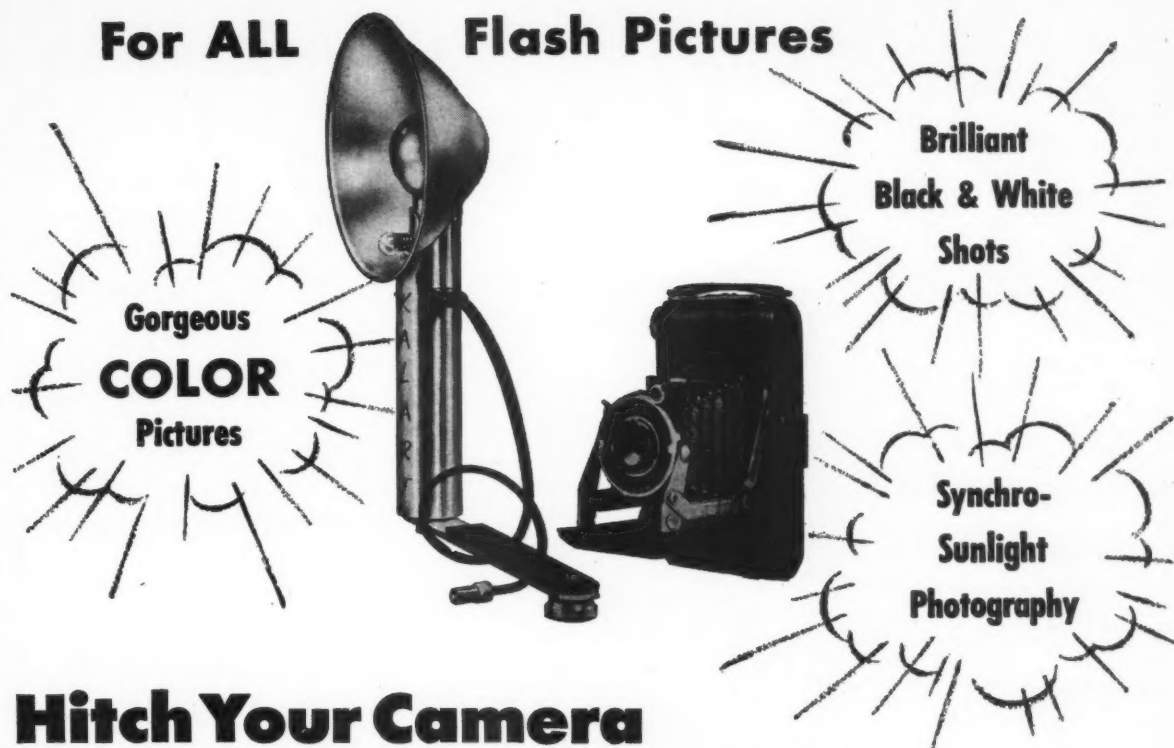
JACQUELYN JUDGE, *Editor*

JOHN WOLBARST, *Man. Ed.* ARVEL W. AHLERS, *Exec. Ed.*
 HERBERT KEPPLER, *Assoc. Ed.* CORA ALSBERG, *Asst. Ed.*
 ANTHONY PALAGONIA, *Art Asst.* BARBARA LEIGHTON, *Edtl. Asst.*
 ERNEST G. SCARFONE, *Art Director*

COPYRIGHT 1952, PHOTOGRAPHY PUBLISHING CORP., 251 FOURTH AVE., NEW YORK 10, N. Y. PHONE OR 3-9300. CHICAGO OFFICE: 333 N. MICHIGAN BLVD., CHICAGO, ILL. PHONE: ANDOVER 3-7132, 7133. CALIFORNIA OFFICE: 6605 HOLLYWOOD BLVD., HOLLYWOOD—PHONE: HEMPSTAD 3171. YEARLY SUBSCRIPTION, \$3.50 IN U.S.A. AND POSSESSIONS, CANADA AND COUNTRIES IN PAN-AMERICAN POSTAL UNION. ELSEWHERE, \$4.50. SINGLE COPIES, 35c, CANADA, 40c.

Member
Audit Bureau of
Circulations

For ALL Flash Pictures



**Gorgeous
COLOR
Pictures**

**Brilliant
Black & White
Shots**

**Synchro-
Sunlight
Photography**

Hitch Your Camera to a **KALART** Speed Flash

\$795

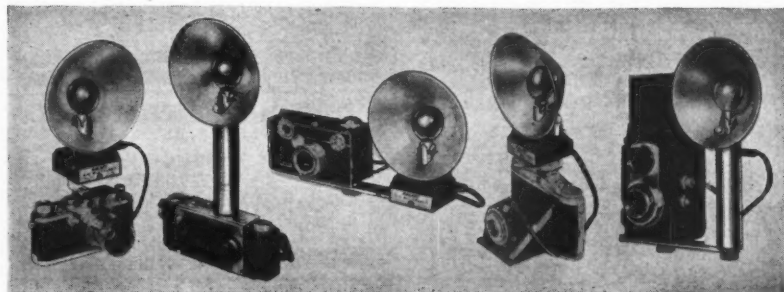
for cameras
with built-in
sync.

THE KALART DE LUXE is today's greatest value in fine flash equipment. Easy to attach. Easy to use. Built-in test light guards against flash failures. Center-dome Concentrating Reflector makes light from midjet flash bulbs equal to bright sunshine. "Safety First" bulb ejector pops out hot used bulbs — guards against scorching your fingers. Self-centering bulb socket automatically assures correct alignment of flash bulb. Beautiful satin-finish battery case dresses up your camera. Comes complete with rubber-cushioned attaching bracket. Models for almost every camera — with or without built-in sync. Ask your photo dealer for demonstration.

\$1430

for cameras
with built-in
sync.

THE KALART B-C incorporates all the latest advances in flash equipment. You can *Be Certain* with a Kalart B-C because the battery is good for two years or more — because it fires the flash bulb by a new superpower method that gets top efficiency out of every bulb. You can *Be Certain* with a Kalart B-C because its built-in test light tells you — *before you shoot* — if battery and flash bulb are OK. Built-in self-closing series outlet for extension flash and power to synchronize up to 6 flash bulbs make a Kalart B-C ideal for multiflash. Models for almost every camera — old or new. Be sure and ask your photo dealer to show you the New Kalart B-C for your Camera.



Left to right—Kalart B-C on Leica, Kalart De Luxe on Stereo-Realist, Kalart B-C on Argus C-3, Kalart B-C on Agfa Speedex, Kalart De Luxe on Ciroflex.

Send for **FREE** illustrated folder
"Helpful Hints on Flash Photography."

MAIL COUPON TODAY

The Kalart Company Inc., Dept. C-1
Plainville, Conn.
Print name and address

Name of Photo Dealer

KALART

MINIFILM'S NEW YEAR BONUS TO YOU!

FREE

Included with the purchase of any used CAMERA value listed herein, Minifilm offers complete Photographic Reference Books at No Extra Charge! These books contain authoritative coverage of these Photographic phases:

- Portraiture at Home
- Modern Negative Retouching
- How to Tone Prints
- Cloud Photography
- Child Portraiture
- Photographic Composition

SAVE 27.60 NEW ARGUS C3 OUTFIT

W/f3.5 ctd. lens,
flashgun, case 69.50
New telephoto lens
Sunshade, 3 filters



BRAND NEW SPECIAL

\$74.95

CLOSE OUT SPECIALS

FAMOUS MAKE CARRYING CASES

New Movie Proj. carrying case, 8mm or 16mm
reg. up to 20.00 . . . 7.95 (state make and model)
L.N. Movie Proj. carrying case, 8mm or 16mm
reg. . . 5.50 (state make and model)
New Slide Proj. carrying case, 35mm or 2 1/4
reg. up to 20.00 . . . 7.95 (state make and model)
New Press carrying case, from 2 1/4 x 3 1/4 to 4x5 size,
incl. access. . . values to 45.00 . . . 12.50
L.N. Press carrying case, 2 1/4 x 3 1/4 to 4x5, incl. acces.
... 7.50

MOVIE FILM VALUES

16mm 50 ft. Roll Kodachrome, Day, Dated... \$3.49
16mm 100 ft. Roll Kodachrome, Tung, Dated... 5.47
16mm 100 ft. Roll Ansco Supreme Neg. Film... 3.49
16mm 50 ft. Mag. Ansco Color Film... 5.69
16mm 100 ft. Super X Blue Base Film... 3.95
16mm 200 ft. Hypan Reversible Film... 8.50

SMASH SALE IMPORTED LIKE NEW BINOCULARS

6x24 Luminax reg. \$24.50 SALE \$15.95
8x25 Dupont reg. 29.50 SALE 19.95
6x25 Toko reg. 32.50 SALE 19.50
6x25 Lemaire reg. 39.50 SALE 22.50
16x40 Goert reg. 49.50 SALE 29.50
6x30 Steinhil reg. 69.50 SALE 32.50
7x50 Ofuna reg. 69.50 SALE 47.50
10x50 Magnar reg. 80.00 SALE 54.50
3 1/2 x 15 Zeiss Theatis reg. 75.00 SALE 54.50
7x50 Leitz reg. 95.00 SALE 59.50

NOTE: ADD 20% F. E. TAX

STROBE GUN CLOSEOUT!

Complete Revelec Unit, incl. battery case and reflector, ext. life, charger, and cc LN \$49.50
Complete Thriftlite Unit, incl. AC unit, battery case, and reflector and Portable battery pack attach..... LN 39.50
Complete Epcu Unit incl. battery unit, battery case and reflector, bracket and charger 79.50
Complete Shaw-Lite AC unit with battery case and reflector..... reg. \$39.50 BN. 29.50
Complete Collux battery unit, and light-head model A2..... 39.50
Complete Dormitzer Candid Strobe unit, incl. battery pack, litehead, bracket, tube, charger and AC unit..... 89.50
Lee custom Strobe unit (studio outfit) with 24" newsreel flood reflectors and stands reg. \$450.00 79.50

FOR COLOR OR BLACK AND WHITE

	Reg.	Sale
Aux. Telephoto Lenses		
Boisey, Argus, Kodak 35.....	19.95	8.95
Kodak Reflex.....	39.50	12.50
Auto Rolleiflex.....	39.50	14.50
Argoflex.....	32.40	12.50
Aux. Wide Angle Lenses		
Argus, Kodak 35.....	19.95	8.95
Auto Rolleiflex.....	29.50	12.50

LEICA-CONTAX-NIKON

	New	Used	Trade In
Leica III f3.5 Elmar.....		99.50	125.00
Leica IIIA f2.8 Summar.....		129.00	100.00
Leica IIIF f2 ctd. Summar.....	385.00	159.50	220.00
Leica IIIC f3.5 ctd. Elmar.....	380.00	199.50	170.00
Leica IIIC f1.5 Summarit.....	434.00	259.00	215.00
Leica IIIF f3.5 Elmar.....	378.50		150.00
Leica IIIF f1.5 Summarit.....	469.20		265.00
Nikon f2 ctd.....	259.00	199.00	115.00
Nikon f1.4 ctd.....	349.00	249.00	145.00
Contax I f2.8 Tessar.....		69.50	45.00
Contax I f2 Sonnar.....		89.00	60.00
Contax II f2 Sonnar.....		159.00	110.00
Contax II f1.5 Sonnar.....		189.00	125.00
Contax III f2 Sonnar.....		199.00	125.00
Contax III f1.5 Sonnar.....		289.00	200.00
Contax IIIA f2 ctd. Sonnar.....	444.00	249.00	210.00
Contax IIIA f1.5 ctd. Sonnar.....	409.50	249.00	210.00
Contax IIIA f2 ctd. Sonnar.....	490.00	314.00	250.00
Contax IIIA f1.5 ctd. Sonnar.....	534.00	349.00	280.00
Contax S f2 ctd. Biotar.....	440.00	179.00	130.00
Contax S f2 Biotar preset.....	460.00	199.00	150.00
Contax D f2 preset.....	460.00	239.00	180.00
Canon IV S f1.8.....	295.00		145.00

35 MM CAMERAS

Boisey B f3.2 ctd.....	61.50	37.50	25.00
Boisey B2 f3.2 ctd.....	73.50	46.00	35.00
Boisey C f3.2 ctd. rfr.....	76.50	47.00	35.00
Ciro 35 rfr. f4.5 Synchro.....	44.15	29.00	20.00
Ciro 35 rfr. f3.5 Synchro.....	49.05	33.50	23.00
Ciro 35 rfr. f2.8 Synchro.....	89.50	54.50	40.00
Retina IA f3.5 ctd Xenar.....		67.50	30.00
Auto M-X Synchro.....		45.00	32.00
Retina I A f3.5 ctd. Xenar.....		74.50	30.00
Auto Retina I A f3.5 ctd. Xenar.....		79.50	60.00
Retina II f2 ctd. Xenar.....		99.50	60.00
Auto Retina II f2.8 ctd. Xenar.....		67.50	40.00
Kodak Bantam f4.5.....		19.95	13.00
Kodak flash Bantam f4.5.....	56.00	32.00	24.00
Kodak 35 f3.5 ctd. rfr.....		76.50	40.00
Kodak Signet.....	92.60	62.50	50.00
Kodak Pony 135.....	35.75	24.50	18.00
Kodak Pony 828.....	31.15	22.50	16.00
Voigt. Vitessa f2 sync.....	159.50	114.00	75.00
Practica f2 ctd. Biotar.....	118.50	89.00	70.00
Voigt. Vito II f3.5 ctd.....		54.50	34.50
Skopar Prentor sync.....	54.50	34.50	20.00
Voigt. Vito II f3.5 ctd.....		61.25	39.50
Skopar ctd. compar.....	61.25	39.50	25.00
Contessa f2.8 ctd. Tessar.....	214.00	119.50	90.00
Anso Karomat f2 Xenon.....	164.10	98.00	75.00
Kine Exakta I f3.5 Tessar.....		99.50	75.00
Kine Exakta II f3.5 Tessar.....		139.00	100.00
Kine Exakta III f3.5 Tessar.....		124.00	100.00
Kine Exakta V f3.5 Tessar.....	189.00	139.00	100.00
Kine Exakta V f3.5 Xenar.....		139.00	110.00
Kine Exakta V f3.5 Xenar.....		199.00	145.00
Tessar Preset.....	269.50		165.00
Kine Exakta V f3.5 ctd. Xenar.....	343.00		185.00
Biotar Preset.....	343.00		185.00
Eka f2.0 ctd. Meritar.....	89.75		45.00
Eka f3.5 ctd. Tessar.....	119.75		65.00
Argus C3 f3.5/cc.....	99.50	39.50	32.00
Argus C4 f2.8 ctd. Xenar.....	99.50	69.50	45.00
Auto Retina IIA f2 X-M.....	164.10	124.00	100.00

REFLEX CAMERAS

Ciroflex B f3.5 ctd.....	57.95	36.00	25.00
Ciroflex C f3.5 ctd.....	76.50	46.00	35.00
Ciroflex D f3.5 flash.....	67.50	49.00	40.00
Ciroflex E f3.5 ctd. flash.....	89.50	61.00	55.00
Ciroflex F f3.5 ctd. flash.....	119.50	99.00	75.00
Graflex 22 f3.2.....	89.50		45.00
Auto Rolleiflex f3.5 Tessar, case.....	149.00	110.00	
Auto Rolleiflex II f3.5 ctd. Xenar, case.....	149.00	110.00	
Auto Rolleiflex II B f3.5 ctd. Tessar flash, case.....	189.00	150.00	
Auto Rolleiflex f3.5 II B ctd. Xenar flash, case.....	160.00	125.00	
Auto Rolleiflex f3.5 II B ctd. Tessar flash, case.....	219.00	175.00	
Auto Rolleiflex III f3.5 ctd. Tessar X-M case.....	285.00	199.00	165.00
Auto Rolleiflex III f3.5 ctd. Xenar X-M case.....	288.00	179.00	140.00
Ikonflex I A f3.5 ctd. Tessar, flash.....	149.00	99.50	80.00
Kodak Reflex I f3.5 ctd. flash, cc.....		64.00	45.00
Kodak Reflex II f3.5 ctd. flash, cc.....	161.00	99.50	65.00
Graflex 214x314 f4.5 ctd. Ektar (Series B).....	129.50	89.50	40.00
Graflex Super B f3.5 ctd. Ektar.....	246.75	144.50	100.00
Graflex Super D f3.5 ctd. Ektar.....	267.25	150.50	110.00

ROLL FILM CAMERAS

Kodak Tourist f8.3 ctd.....	49.25	39.50	30.00
Kodak Tourist f4.5 ctd.....	72.50	59.50	48.00
1/500th flash shutter.....	97.40	89.50	45.00
Medalist I f3.5 ctd.....	89.50	89.50	85.00
Medalist II f3.5 ctd.....	304.75	149.00	125.00
Super Ikonta B f2.8 ctd. Tessar Sync.....	236.00	159.00	110.00
Super Ikonta B f2.8 Tessar.....		99.50	70.00
Super Ikonta B f2.8 Tessar Sync.....		281.00	189.50
Super Ikonta C f3.5 ctd. Xenar flash.....	186.00	115.00	90.00
Voigt. rfr. Bessa II f3.5 ctd. Skopar flash.....	124.50	79.00	60.00
Voigt. rfr. Bessa II f3.5 ctd. Heliar flash.....	169.50	104.00	80.00
Polaroid Land Camera.....	89.75	99.50	50.00

IN TIME FOR XMAS!

BN 35mm Boisey B2
F3.2 ctd lens, cpld
rfr, built-in synch.
Reg. 73.50

ONLY
\$58.75

Case 5.95
BN Flashgun 7.50



DISPLAY MODEL

Brand New Leica 111F Camera!

Built in flash synch for all speeds.

only **\$94.50**

... and your Leica IIIC Body.
Subj. to Inspection
Brand New Leica Meter.....24.00
Jen Captor for IIIF.....15.95
Latest used Leica IIIC w/f2 ctd Summar lens.....199.50
(new 382.20)

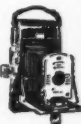


Enliven Your Party!

Use a Polaroid Land Camera, finished prints in 60 seconds.

Special **\$59.50** used

New Polaroid Flashgun.....11.00
Polaroid Meter.....14.25
Polaroid Film, 8 exp..... 1.75



STEREO REALIST

OUTFIT!

Reg. 189.50

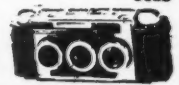
SAVE 54.50

YOUR **\$134.00**

COST

Complete

• Case, Flashgun and Stereo Viewer.



Only a Few Left!

Rolleicord III Camera



f3.5 ctd Xenar lens, flash
synchro com-
pur shutter .. **\$92.50** used

Brand New Kine Exakta 11!

35mm single Reflex Camera.

Speeds from 1/1000 to 12

full seconds. f2 ctd Biotar.

Only **189.50**

Case 6.50



— SPEEDY SERVICE —

For all GI's and civilians for Holiday purchases!! ORDER NOW!!



Brand New 4x5 Pacemaker CROWN GRAPHIC OUTFIT!

Complete with Kalart Cpld. Rfdr. 135mm f4.7 ctd Schneider Xenar in (M-X) Synchro compur shutter, Graflock back, Helland Flash, ICFH, ALL BRAND NEW.

Completely installed.....\$189.50
Pacemaker Speed Graphic Outfit equipped as above.....\$214.95

Don't Be Without an EXPOSURE METER!!

It's expensive to guess! Enjoy perfect negatives and save on film (no waste)...

BRAND NEW... Latest

	Reg.	Special
Weston Master II.....	\$27.63	\$21.50
GE DW68 ASA.....	19.95	16.50
GE PRI.....	29.25	21.50
Norwood.....	32.50	26.95

incl. carrying case

Store Display Models. Guaranteed Perfect

XMAS LIVES ON & ON... BN REVERSE 88

F2.5, 4-Lite Movielites and Lamps, and case, 2 Rolls of Color Film (Kodachrome) Reg. 100.40

Only \$76.95

w/B&H Companion.....	\$4.50
w/deJur Citation.....	\$2.00
w/Kodak Reliant.....	\$6.00

THEY'RE BACK GUARANTEED FRESH 35mm Ansco Color Reloads

\$1.29 4 for 4.89

20 Exp. Daylight or Tungsten

NEW YEAR SAVINGS ON NEW CIOFLEX CAMERAS!

Brand New 2 1/4 x 2 1/4 Cioflex w/f3.5 ctd, Rapstar Model D Al-phax synchro. (reg. \$67.50) NOW \$67.50 B.N.

Model E Rapax synchro (117.55). Carrying Case 6.50. NOW \$89.50 B. N.



The Most Talked About Camera! ... at a Savings.

The Famous Nikon Camera with f1.4 ctd lens. (reg. 349.) \$249.00 used

with f2 ctd lens. (reg. 259.) \$199.00 used

case.....9.00

LEN F3.5 ctd 35mm Nikkor W.A. lens..... 74.50

L.N. 50mm f1.4 Nikkor.....139.00

Available in Leica or Contax Mounts.

Now You Can Own a Complete BELL & HOWELL 8mm OUTFIT!

JUST OUT! LATEST MODEL!

The New B&H Model 221 8mm Proj., 400 ft. capacity 500W and case.

PLUS a used B&H Companion 8mm Camera, F2.5 ctd Lens, w/4 speeds, 2 lens view-finder.

BOTH FOR ONLY \$135.00



PRESS CAMERAS

	New	Used	Trade In
Anniversary Graphic 2 1/4 x 3 1/4 f4.5 rfd.....	99.00	75.00	
Anniversary Graphic 3 1/4 x 4 1/4 f4.5 rfd., 3, cth, fpa.....	120.00	90.00	
Anniversary Graphic 4x5 f4.5 rfd., flash, 3 cth, fpa.....	140.00	110.00	
Busch 2 1/4x3 1/4 f4.5 ctd, cpld RF.....	79.00	60.00	
Pacemaker Crown Graphic 2 1/4x3 1/4 f4.5 ctd, flash, cth.....	239.85	195.00	120.00
Pacemaker Crown Graphic 3 1/4 x 4 1/4 f4.7 ctd, rfd., flash, cth.....	232.80	190.00	120.00
Pacemaker Speed Graphics equipped as above.....	279.50	160.00	130.00
2 1/4x3 1/4 f4.5 ctd.....	284.45	160.00	130.00
Century Graphic 2 1/4x3 1/4 f4.5 ctd.....	108.00	60.50	55.00

8 mm CAMERAS

Revere 50, f2.8.....	49.50	27.00	22.00
Revere 88, f2.5.....	72.50	39.50	32.00
Revere c40 Mag. f2.8.....	99.50	89.50	48.00
Revere c44 Mag. Turret f2.8.....	129.50	74.50	60.00
Revere B 65, Mag Turret f2.8.....	112.50	64.50	52.50
Keystone K 22 f2.5 ctd.....	142.50	75.00	65.00
Keystone K 22 f2.5 ctd.....	73.00	39.50	32.00
Keystone K 40 Mag f2.5.....	150.95	85.00	80.00
De Jur Citation, f2.5 ctd.....	107.75	64.00	50.00
De Jur Mag. Embassy f2.5 ctd.....	77.50	46.50	35.00
De Jur Mag. Embassy Turret f1.9 ctd.....	106.95	64.00	50.00
Kodak Brownie f2.7 ctd.....	143.95	87.50	65.00
Kodak Reliant f2.7 ctd.....	43.30	29.50	24.00
Kodak Magazine f1.9 ctd.....	82.30	49.50	38.00
B. & H. Companion f2.5.....	150.95	85.00	80.00
B. & H. Sportster f2.5.....	79.95	47.00	35.00
B. & H. Tri lens f1.9.....	130.95	94.00	70.00
B. & H. Auto 8 Mag f2.5.....	134.95	85.00	70.00
B. & H. Auto 8 Mag Turret f1.9 ctd.....	189.95	134.00	100.00
Bolex I. 8 f2.8 De Luxe f1.9 ctd, Lytar.....	97.00	52.00	42.00
Bolex H 8 Lender, f1.9 ctd, Lytar.....	291.50	145.00	115.00
Bolex H8 De Luxe f1.9 ctd, Lytar.....	364.75	239.00	180.00

16 mm CAMERAS

Kodak Royal, Mag f1.9 ctd.....	176.25	122.00	90.00
Revere Mag f2.5 ctd.....	157.50	85.00	68.00
Revere Mag Turret f1.9.....	215.50	115.00	85.00
Cinklok f2.5.....	71.30	39.00	32.00
Keystone A 7, f2.5.....	76.00	44.00	30.00
Keystone A 9, f2.5.....	72.50	42.00	30.00
Keystone A 12, f1.9.....	151.00	94.00	70.00
Keystone Mag, K50 f2.5.....	127.00	74.00	60.00
Keystone Mag Turret, K35 f1.9.....	176.50	112.00	85.00
Bolex H-16 Lender f1.9 ctd, Lytar.....	299.50	150.00	115.00
Bolex H-16 De Luxe f1.9 ctd, Lytar.....	372.75	245.00	190.00
B. & H. Autolux 200, f1.9.....	314.95	142.00	110.00
B. & H. Automaster Turret f1.9.....	139.00	110.00	85.00
B. & H. Automaster Turret f1.9.....	259.95	189.00	130.00
B. & H. TODL Turret f1.9 ctd.....	289.95	229.00	195.00
Pathe Super 16 Turret.....	480.00	325.00	215.00

8 mm & 16 mm PROJECTORS

Revere 85 DL cc.....	124.50	67.50	50.00
Revere 90 cc.....	159.50	89.50	70.00
Keystone K58 750 watt.....	139.50	79.50	60.00
Keystone K109 750 watt.....	159.50	99.00	80.00
De Jur 750.....	177.50	109.00	85.00
De Jur 1000.....	169.25	100.00	85.00
B. & H. Regent.....	169.25	100.00	85.00
8mm B. & H. 221 Proj.....	185.00	104.00	80.00
Ampro Futurist.....	185.00	104.00	80.00
Keystone A52 750 watt.....	159.50	99.00	80.00
Keystone 151 750 watt cc.....	159.50	99.00	80.00
Revere 750W.....	159.50	99.00	80.00
B. & H. Diplomat.....	221.95	129.00	130.00
Revere Sound Proj.....	325.00	209.00	150.00
B&H 285C Sound Proj.....	449.50	295.00	225.00
B. & H. 221 Proj.....	99.50	50.00	40.00

SLIDE PROJECTORS

Argus P8B 200W Blower.....	49.50	33.00	24.00
Golde Master 200W.....	49.50	33.00	24.00
Golde Coronet 200W Blower.....	49.50	33.00	24.00
TDC A1 150W.....	34.75	23.50	18.00
TDC Mainliner.....	34.75	23.50	18.00
TDC Stereo 2-500W Lamps.....	175.00	115.00	80.00
TDC Streamliner 300 DUO.....	89.50	43.00	35.00
TDC showpak Blower.....	54.50	30.00	24.00
TDC Streamliner 300 DUO.....	89.50	43.00	35.00
SVE Skyline 200W.....	41.25	25.50	18.00
SVE Instructor 300W.....	52.45	32.00	22.00
Kodaslide 2.....	49.50	27.00	18.00
Kodaslide Merit.....	49.50	27.00	18.00
Kodaslide Table Viewer 4X.....	49.50	34.00	25.00
LaBelle 2500 Watt.....	95.00	59.00	43.00

ACCESSORY LENSES FOR LEICA

28mm f3.5 Serenar.....	177.25	124.00	100.00
35mm f2.8 Serenar.....	145.25	104.00	80.00
35mm f3.5 ctd, Elmar.....	49.25	31.00	24.00
35mm f3.5 ctd, Summaron.....	102.00	75.00	50.00
50mm f3.5 ctd, Elmar.....	49.25	31.00	24.00
50mm f2 ctd, Summarit.....	187.00	109.00	80.00
50mm f1.5 ctd, Summarit.....	221.95	129.00	130.00
80mm f1.5 ctd, Summarit.....	442.00	274.00	200.00
80mm f4 ctd, Elmar.....	49.25	31.00	24.00
90mm f4 ctd, Elmar.....	132.60	84.50	63.00
135mm f4.5 ctd, Hektor.....	88.00	55.00	40.00
135mm f4.5 ctd, Hektor.....	88.00	55.00	40.00
Chrome.....	165.00	119.50	90.00

FOR CONTAX

35mm f2.8 ctd, Biogon.....	245.00	119.00	80.00
50mm f2 ctd, Sonnar.....	129.00	89.00	70.00
135mm f4 ctd, Sonnar.....	170.00	109.00	75.00

FOR KINE EXAKTA

35mm f2.5 Retrofocus W.A. 135mm f4 ctd, Triotar.....	99.50	64.50	40.00
Penta Prism for V & Vx w/case.....	75.00	84.00	35.00
	53.00	36.00	27.00

MINIFLEX CAMERA

1190 AVENUE OF AMERICAS N. Y.

BET. 46th and 47th St

GOLDE MANUMATIC SLIDE PROJECTOR!

• 2x2 300W • Blower Cooled

Never used—Store demo!

Your Cost ONLY

\$42.50

GOLDE REFLEX

ONLY \$59.95



BRAND NEW Enlargers Reduced!

Up to 25%

Federal 135, W Lens.....	37.40
Federal 269, W Lens.....	29.50
Federal 279, W Lens.....	35.00
Federal 269 C.L. and lens.....	39.50
Federal 315 C.L. and lens.....	57.75
Federal 450 C.L. f4.5 lens.....	82.25
DeJur Versatile 11 condenser or C.L. f4.5.....	74.95
DeJur 4x5 Professional condenser or C.L.....	134.95



For Kine Exakta, Leica, Contax S. & Praktal!

NEW BELLOSCOPE

for extreme close-up work with exposure index scale.

Only \$24.75 (reg. 44.50 value)

Revere 85 Projector! for 8mm movies..

500 Watts, brilliant illumination, adjustable speed, automatic rewind, coated f1.6 lens. Gear driven. reg. 124.50

Special \$72.50 with case USED



SCOOP! SAVE! Brand New Press Outfits!



Latest 2 1/4x3 1/4 Busch w/f4.5 ctd lens in synch shutter, Kalart rfd installed. Brand New, Complete.....\$109.95

Latest 4x5 Busch Pressman, double extension bellows, revolving back w/4.5 ctd Woll. lens in Rapax Shutter, Kalart rfd installed. Brand New, Complete.....\$129.50

Latest Improved 16mm SUPER PATHE CAMERA

- 100 ft. capacity
- View thru shooting lens
- Adjust focus & lens opening while running the camera
- Backwind dissolves, completely professional
- Uses all C mount lenses

Reg. 450. ONLY 325.00

DEMONSTRATOR MODEL w/o sound sprockets.....269.00



Brand New S.V.E. SKYLINE B PROJ.

2x2 300 Watt. Blower Cooled.

Reg. 52.45 \$38.95

with automatic changer.....49.95

15% DOWN!

You can buy that camera now, under Miniflex Time Payment Plan with just 15% Down... thereafter only pennies a day. Trade in of your old equipment can also be accepted as down payment.

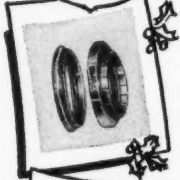
A BETTER PICTURE EVERY TIME with Tiffen FILTERS AND LENS ACCESSORIES



**COATED & NON-COATED
FILTERS FOR ALL
STILL & MOVIE
CAMERA & LENSES.**
For Black-and-White,
Kodachrome,
Ektachrome and Ansco
Color films. Tiffen
"Photar" Black-and-
White Filters supplied in
Solid Optical Glass.



**LENS SHADES FOR
ALL STILL & MOVIE
CAMERAS & LENSES.**
Available in a wide
variety of sizes and
contours to fit individual
requirements. Interior
surface blackened with
light absorbing material.
Each unit engraved with
size and series.



**ADAPTER RINGS FOR
ALL STILL & MOVIE
CAMERAS & LENSES.**
Adapter Rings, Step-Up
Rings, Retaining Rings,
available for every
camera and lens made.
All units engraved with
lens or size and series.



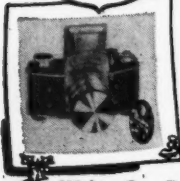
SELECT-A FILTER SAFE
Holds 6 Filters, Adapter
Ring, Lens Shade. Has
ingenious push-button
selector, molded strap
loop, positive snap
closure. Filters held
securely & apart.
Small, compact, visible.



**COATED FILTERS
FOR STEREO REALIST
CAMERA.**
A matched pair of Tiffen
filters that will remain
on Stereo Realist camera
when case is closed. For
the F2.8 and F3.5
lenses. Packaged in
handy plastic case.



**QUICK READING
DIAPHRAGM CONTROL
FOR ARGUS C, C2
& C3 USERS.**
An amazingly simple
device which converts the
f stop readings from the
front of the lens to the
top, where they can be
quickly read. Complete
instructions enclosed.



SCREW-IN LENS CAPS
Complete protection
against dust and
accidental scratching of
valuable lenses. Precision
threaded of solid
duraluminum. Cannot
slip off or fall off.

Write For Free Catalog

*The most complete
line of lens and filter
accessories in the world.*

Tiffen MANUFACTURING CORP.
617 621 SACKETT ST. BROOKLYN 17, N. Y.

the last word

Amateur or Professional?

Sirs:

What is an amateur? I mean this in connection with contests, such as the \$75,000 contest mentioned in your October issue.

At present I supplement my income by taking wedding pictures, and photographs for the YMCA and my church. Just what is my status?

New York, N. Y. Lawrence G. Heinrich

• *If less than half your income is derived from photography, then you are an amateur, as far as our \$75,000 contest is concerned. This is a commonly used definition. But since there are exceptions, it's a good idea to check before you enter other contests.—Ed.*

As Others See Us

Sirs:

As I have noticed that pictorialist views have only a rare chance of winning a prize in the U.S.A., I thought



this silly shot might do better. It was taken with a Praktiflex at f/4 and 1/25 sec., using two floods.

Koksyde, Belgium Marcel De Meirleir

Don't Get Mad

Sirs:

How do you BLOW UP a negative or a print? Do you use some kind of a hand bellows or power fan for large sizes? I have been a photographer for many years, but can't figure out why you talk about blowing up.

Chicago, Ill.

Richard Goodman

• *Webster has two definitions—but if you want to know more about the photographic side look at page 54 of this issue. F. F. Pype tells about Enlarging from A to Z, in the first of a series of articles on this subject.—Ed.*

How About It?

Sirs:

Perhaps I am judging too fast on the article "The New Trend In Color" in the Nov. issue of MODERN, pages 50 to 55. Pray tell why would a photo be classed as "good" when it's out of focus like our friend Ed Brown's shot on page 51?

Medina, Ohio

Alex Morton



Taken by von Schnarendorf with GOERZ DAGOR LENS

GOERZ DAGOR PRECISION PHOTO LENSES

Craftsmanship, Experience and Integrity are the Pillars on which the C. P. Goerz American Optical Company has built its unparalleled reputation for producing the finest, high-quality, precision photo lenses.

For over half a century, the experience and background of this Company has played a vital part in all branches of photographic activity. Our highly trained technicians continue to prove their ability and craftsmanship in this specialized field.

Today, photographers all over the world rely on GOERZ Lenses for dependable performance and many enthusiastic users proclaim them to be the world's best.

Remember...your lens is the heart of your camera. Choose it wisely and treasure it always. There is no substitute for quality! Whether your requirements are run-of-the-mill or something special, we will be happy to serve you. Write Dept. MP-3

**C. P. GOERZ AMERICAN
OPTICAL COMPANY**
Office and Factory
317 EAST 34TH STREET
NEW YORK 16, N. Y.

Dowling's

FIFTH AVENUE

10% DOWN

30 DAY FREE TRIAL

NET 30 DAY GUARANTEE

- POSTAGE AND INSURANCE FREE. CAMERAS SHIPPED AIR PREPAID, WHENEVER QUICKER AND WHEREVER POSTAL REGULATIONS PERMIT.
- EASY PAYMENTS FOR CIVILIANS AND MILITARY AROUND THE WORLD-OVER.

It's Economy To Start With The Finest BOLEX H-16 *De Luxe*



Good movie equipment is a lifetime investment. Although we gladly make allowances on used equipment, why trade up the expensive way through a succession of cameras that remain only almost as good as the best? Whether you are a G.I. in Korea or Mr. John Doe in Omaha, you can afford to own the best now because of Dowling's Easy Payment Plan! Even among the aristocratic Bolex family, here's the ultimate... the H-16 DE LUXE with a battery of the 3 top (Swiss) Kern-Paillard "Visifocus" coated lenses:

- Switar 25mm (normal) f/1.4
- Yvar 16mm (wide angle) f/2.8
- Yvar 75mm (telephoto) f/2.8

The DE LUXE outfit is also equipped with both Eye-Level Critical Focuser and Octameter, and is furnished with the luxurious H-1, top-grain, compartment carrying case. Complete \$712.50 Cash or \$71.25 Down.

Other Bolex H-16 (Leader) outfits with lens, from \$299.50 Cash or \$29.95 Down.
Bolex Stereo System \$397.50 Cash or \$39.75 Down.
Pan Cinor Variable Focal Length Lens \$447.50 Cash or \$44.75 Down.
Complete Bolex Brochure and Price List on Request

Stereo is REAL! Stereo is BREATH-TAKING! Stereo is for YOU!



Photographers in all corners of the globe look to Dowling's Fifth Avenue as Stereo Headquarters. Let us help you open a new world of lifelike 3 dimensions and glorious natural color today!

Stereo Realist Camera (illustrated) with Ctd. f/3.5 lenses \$159 Cash or \$15.90 Down
Reverse Stereo Camera with Ctd. f/3.5 lenses \$174.50 Cash or \$17.45 Down
View-Master Personal Stereo Camera with Ctd. f/3.5 lenses \$149 Cash or \$14.90 Down
TDC Stereo Vivid Projector \$175 Cash or \$17.50 Down
Taylor Stereo Table Viewer \$82.50 Cash or \$8.25 Down
Stereo Realist Viewer, ST 61 \$19.75 Cash or \$1.97 Down
Stereo Realist Handi-Viewer \$9.50
McKay, "3-Dimensional Photography" \$5.75
Tydings, "Stereo Realist Guide" \$1.95
Kodachrome K335 Film, Daylight or Type A. Price includes processing and mounting of 20 Stereo pairs by Kodak... \$4.75
Without Obligation, Use the Coupon to Receive Our Trade-In Allowance Offer on Yesterday's Equipment Against a New Stereo Camera...

RECTAFLEX



Eye-level ground-glass focusing plus built-in rangefinder. Schneider Xenon Ctd. f/2.0 lens \$295 Cash or \$29.50 Down. Accessories: Angenieux 35mm Ctd. f/2.5 lens \$140.00; Angenieux 90mm Ctd. f/2.5 lens \$162.50; Miro Adapter \$32.80.

1953 ROBOT ** Star



Built-in motor for rapid-fire sequence shots! Takes standard 35mm cartridges. Schneider Xenon Ctd. f/2.8 lens \$217.50 Cash or \$21.75 Down; or Schneider Xenon Ctd. f/1.9 lens \$249.50 Cash or \$24.95 Down.

canon IV



With Serenar Ctd. f/1.8 lens \$295 Cash or \$29.50 Down. Accessory Serenar lenses, each furnished with matched parallax correcting viewfinder and case, and coupled for Leica and Canon include: 28mm f/3.5 \$177.85; 35mm f/3.2 \$125.45; 85mm f/2.0 \$187; and 135mm f/4.0 \$122.25.

CONTAX IIA



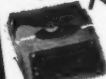
Zeiss' finest! With Tessar Ctd. f/3.5 lens \$334 Cash or \$33.40 Down; with Sonnar Ctd. f/2.0 lens \$444 Cash or \$44.40 Down; or with Sonnar Ctd. f/1.5 lens \$488 Cash or \$48.80 Down.

RETINA IIA



Compact, precise and reliable... perfect for travelling! Full M-X synchronization; rapid film advancement; With Schneider Xenon Ctd. f/2.0 lens \$164.10 Cash or \$16.41 Down. Top-grain case \$8.50.

HERMES Rocket



For servicemen, travelers, and your World's lightest typewriter—8 lbs. 11 oz. Built for reliability by Paillard of Bolex camera fame. Keyboards available in over 70 languages. Complete with metal carrying case. \$68.37 Cash or \$6.83 Down.

New Bell & Howell Filmosound "202" RECORDING SOUND PROJECTOR



Complete \$699. Cash or \$69.99 Down.

La Belle Automatic Slide Projectors



Show 75 slides in sequence with finger flick easel Model 200 (watt) \$68.50 Cash or \$6.85 Down; Model 200 (watt) \$95 Cash or \$9.50 Down; or Model 302 (500 watt) \$154.95 Cash or \$15.49 Down.

Revere T-700 Balanced -Tone TAPE RECORDER



High fidelity, ultra-modern 1953 model. Push-button operation; 2 hours recording per reel. \$225 Cash or \$22.50 real. Other tape recorders from \$119.75 Cash or \$11.97 Down, designed to satisfy the most discerning audio-enthusiast. Please write!

Memo

Mail coupon for D.F.A.'s complete 1953 Catalog. Nothing like it in the camera field. It's free! P. P. When in New York, visit Dowling's

Voigtlander VITESSA



Perfect for fast action, sequence shots! With Ultraron Ctd. f/2.0 lens \$159.50 Cash or \$15.95 Down.

ZEISS IKOFLEX IIA



New 1953 fully M-X synchronized model, with Compurized shutter. Features brilliant ground-glass focusing; instant automatic film stop, and Tessar Ctd. f/3.5 lens. \$260 Cash or \$26 Down.

Dowling's

Oregon 4-6275
175 FIFTH AVE., NEW YORK 10, N. Y.
In a New York Landmark, the Flatiron Bldg. at 23rd St.

Please ship the following immediately:..... Dept. MP153A

Enclose is \$.....as Down Payment or Complete Payment.

I agree to pay \$.....Monthly for.....Months until merchandise is paid for.

Please give top Trade-in Offer on.....and apply as down payment when I accept your offer.

☐ Send Illustrated Literature On.....

☐ Send Illustrated Catalog ☐ Send Pamphlet on "Deferred Payments"

Name.....

Address.....

City.....Zone.....State.....

MAIL TODAY

ALL EQUIPMENT LISTED IS BRAND NEW—FACTORY PACKED. OUR STOCKS OF BOTH USED AND NEW EQUIPMENT ARE HOWEVER MOST EXTENSIVE. PLEASE WRITE FOR ANYTHING PHOTOGRAPHIC.

UP TO 30% OFF

ALL ITEMS GUARANTEED FOR 1 YEAR!!!

MINIATURE CAMERAS:

Praktiflex, chrome, Victor F2.9, like new.....	35.00
Argus C-5, ctd. 3.5, like new, flash, case.....	43.50
Clarus M5-35, coated 2.5, like new.....	45.00
Bolsay 9-2, coated 3.5, Synchro, like new.....	49.50
Super Dollina, Xenon F2.2, Comp. Rap., like new	59.50
Minox 11, ltwt., ctd. 3.5, NEW.....	69.50
Kodak Signet, ctd. Ektar 3.5, Synchro, l. n.	69.50
Auto-Retina 1A, ctd. Xen. 2.8, M-X Syn., NEW	65.00
Auto-Retina 1A, ctd. Ektar 3.5, M-X Syn., NEW	75.00
Retina 11, S.W., ctd. Xenon F2.2, like new.....	84.00
Karat 36 (Karamati), ctd. F2.2, Synchro, l. n.	89.50
Auto-Retina 11A, ctd. Xenon F2.2, M-X Syn., l. n.	119.50

FROM OUR LEICA DEPARTMENT:

Leica F, chr., ctd. Elmar 3.5, l. n.....	99.50
Leica G, ctd. Elmar 3.5, l. n.....	129.50
Leica G, ctd. Summarit F2.2, like new.....	179.50
Leica III C, coated Elmar 3.5, like new.....	139.50
Leica III C, ctd. Summarit F2.2, like new.....	219.50
Leica II F, Summ. 1.5 OR Nikkor 1.4, l. n.....	269.50
Leica III F, ctd. Summarit F2.2, like new.....	279.50
Leica III F, Summ. 1.5 OR Nikkor 1.4, l. n.....	329.50
Ctd. Summaron 3.5, 35 mm, chrome, like new	109.50
Ctd. Elmar 3.5, 50 mm, chrome, like new.....	45.00
Ctd. Summarit 1.5, 50 mm, chrome, like new.....	165.00
Ctd. Nikkor 1.4, 50 mm, chrome, like new.....	165.00
Ctd. Super Rokkor 2.8, 88 mm, chrome, l. n.	299.50
Ctd. Summarex 1.5, 85 mm, chrome, like new	74.50
Ctd. Angenieux 2.5, 90 mm, like new.....	79.50
Ctd. Elmar F2.2, 90 mm, chrome, like new.....	74.50
Ctd. Serenar F4, 100 mm, chrome, like new.....	62.50
Ctd. Culinar 4.5, 135 mm, chrome, like new.....	109.50
Ctd. Hektor 4.5, 135 mm, chr. & blk., l. n.....	79.50
Ctd. Hektor 4.5, 135 mm, chrome, like new.....	115.00
Ctd. Telyt 4.5, 200 mm, latest, Ref. H. l. n.	193.50
Twee Zoom Finder, l. n. \$35.00; Imarect, l. n.	32.50

FROM OUR CONTAX DEPARTMENT:

Contax 1A, Sonnar F2.2, slow speeds, like new....	79.50
Contax 1A, Sonnar F2.2, like new.....	225.00
Contax 1A, ctd. Sonnar 1.5, like new.....	285.00
Contax 111A, Sonnar F2.2, like new.....	325.00
Contax 111A, ctd. Sonnar 1.5, like new.....	325.00
Contax S, F-ctd. Biotar F2.2, Pre-set Dia., NEW	225.00
Tessar F8, 28 mm, chrome, like new.....	69.50
T-ctd. Biogon 2.8, 35 mm, ltwt., like new.....	115.00
T-ctd. Tessar 4.5, 40 mm, f. Contax S, l. n.	79.50
T-ctd. Biotar 1.5, 75 mm, f. Contax S, l. n.	119.50
Ctd. Nikkor 3.5, 135 mm, chrome, like new.....	89.50
Sonnar F4, 135 mm, chrome, like new.....	89.50
T-ctd. Sonnar F4, 135 mm, ltwt., like new.....	115.00
T-ctd. Triotar F4, 135 mm, f. Contax S, NEW	79.50

HIGHEST CASH PRICE OR LIBERAL TRADE-IN ALLOWANCE FOR YOUR USED CAMERA, LENSES AND EQUIPMENT.

WRITE TODAY FOR FREE ESTIMATE!!!

REFLEX CAMERAS:

Argoflex EF, ctd. 4.5, Synch., like new.....	42.50
National Graflex Ser. II, B&K Tess. 3.5, l. n.....	49.50
V. P. Exakta, Xenar 2.8, like new.....	45.00
B&B Graflex 3 1/2x4 1/4 Ser. B, 4.5, l. n., Sepulm	75.00
Kodak Reflex 1, ctd. 3.5, Syn., l. n., case.....	65.00
Stand. Reflex, crank oper., Tess. 3.5, l. n.	65.00
Ciroflex E, ctd. 3.5, Rapax Synchro, l. n.	75.00
B&B Graflex 3 1/2x4 1/4 Ser. D, Tessar 3.5, l. n.	85.00
Rolliflex III, ctd. 3.5, Synch., used.....	105.00
Sup. D Graflex 3 1/2x4 1/4, ctd. Ekt. 4.5, l. n.	119.50
Auto Rollei, Tess. 3.5, Meiland Solen., used.....	125.00
1951 Auto Rollei, T-ctd. Tess. 3.5 (X), used.....	125.00
1952 Auto Rollei, ctd. Xen. 3.5 (M-X), used.....	199.50
1952 Auto Rollei, T-ctd. Tess. 3.5 (M-X), used	219.50

ROLL FILM AND PRESS CAMERAS:

Avus 2 1/2x3 1/4, Skopar 4.5, Comp., like new....	35.00
Ikonta C, Novar 3.5, Comp. Rap., like new.....	39.50
Avus 2 1/2x3 1/4, Skop. 4.5, Rims, Comp., KRF, l. n.	49.50
Recomar 9x12 cm, 4.5, Rims, Comp., KRF, l. n.	55.00
R. P. Bessa 120, Helier 3.5, C.R., like new.....	39.50
Super Ikonta A, Xenar 3.5, Compur Rapid, l. n.	69.50
Bessa II, ctd. Color-Skopar 3.5, M-X Syn., l. n.	79.50
Medalist I, ctd. Ektar 3.5, like new, case.....	85.00
Super Ikonta A, T-ctd. Tess. 3.5, Synch., l. n.	95.00
Ann. Speed Gr. 4x5, Tess. 4.5, KRF, l. n.	95.50
Bush Vuc-Focus 4x5, ctd. Ekt. 4.7, Fl. Sup., l. n.	149.50
Medalist II, ctd. Ektar 3.5, Syn., l. n., case.....	155.00
Meridian 4x5, ctd. Ekt. 4.7, Solen., KRF, l. n.	185.00
8x10 Eastman 2-B View, 3 backs, l. n.....	59.50

MOVIE CAMERAS, PROJECTORS:

Revere 85, 8 mm, ctd. 2.8, Zeder, like new.....	39.50
Keystone K-29, 8 mm, ctd. 2.8, like new.....	39.50
Revere 85, 8 mm, ctd. 2.5, like new.....	45.00
Revere 70, 8 mm Mag., ctd. 2.8, like new.....	65.00
Revere 70, 8 mm Mag., ctd. 1.9, like new.....	85.00
Cinclair 16 mm, ctd. 2.5, like new.....	35.00
Rollei H-16 Deluxe, ctd. Switar 1.5, like new	39.50
Kodascope 8-70, 8 mm Proj., 500 W., l. n., case	59.50
Revere 85 Deluxe, 8 mm Proj., 500 W., l. n.	79.50
Keystone A-8, 8 mm Proj., 750 W., l. n., case	89.50
Keystone K-109, 750 W., l. n., Splicer, case.....	119.50
Keystone A-82, 16 mm Proj., 750 W., like new	89.50
Revere 16 mm Sound Proj., 750 W., like new	175.00
Argus PB-300, 300 W., f. 51, & Str., NEW, case	43.50
Goide Reflex 2 1/2x4 1/4, 300 W., blower, l. n., case	59.50

LENSES:

Telo-Xenar 3.5, 75 mm, chrome, f. Robot, l. n.	39.50
Ctd. Retrofocus 2.5, 35 mm, f. Kine Ex., l. n.	79.50
T-ctd. Biotar 1.5, 75 mm, f. Kine Ex., l. n.	129.50
T-ctd. Triotar F4, 135 mm, f. Kine Ex., NEW	59.50
Ctd. Xenar 3.5, 135 mm, f. Kine Ex., like new	99.50
Pentaprium Finder, f. Kine Ex. V. Vok., l. n.	49.50
Tessar F8, 95 mm, f. Exakta VP or B, l. n.	49.50
Telo-Megor 5.5, 180 mm, f. Exakta V for B, l. n.	39.50
Gr. Super Anst. 4.5, 12 1/2", f. B&H 172, l. n.	35.00
Ctd. B&H Tessar 3.5, 1 1/2", for B&H 172, l. n.	35.00
Ctd. Rapnar 2, 12 mm, "C" Mount, like new.....	27.50
Kodak 3.5, 2", "C" Mount, like new.....	27.50
Ctd. Rapnar F4, 3", "C" Mount, like new.....	45.00
Trioplan 2.8, 3", "C" Mount, like new.....	45.00
Kodak 4.5, 4 1/2", "C" Mount, like new.....	39.50

CAMERA EXCHANGE

136 EAST 58th STREET, NEW YORK J-22, N. Y.

COFFEE BREAK with the editors

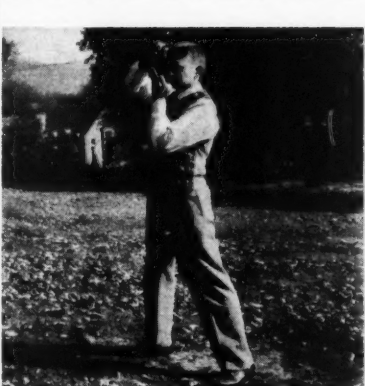
THIS MONTH'S COVER . . .

We won't vouch for the skiing ability of our cover girl this month, but she *does* look good holding onto those pieces of wood. For the information on how the photograph was made plus other information on making color portraits outdoors, turn to the article on pages 50 and 51.

WE PROUDLY ANNOUNCE . . .

About six months ago, a letter arrived on our desk from a member of the staff of Bethany College in West Virginia. With no suitable photographers among its 486 students and not enough occasion to hire a photographer full-time, Bethany asked us to find a high school graduate who would take on the job as college photographer in return for a four-year college scholarship including room and board. The official photographer would be able to earn pocket money by photographing college dances, football games and such.

We promptly got in touch with the New York Police Athletic League's photographic division. This outfit, directed by photographer Victor Keppler, maintains photographic centers throughout New York to channel the efforts of city children to useful purposes. Eighteen-year-old PAL member Melvin Miller was recommended by Keppler. He came from a family where college plans had not even been considered because of strained financial circumstances. MODERN examined his work, done in the PAL darkrooms and as a photographic counselor at a summer camp. Bethany College was not-



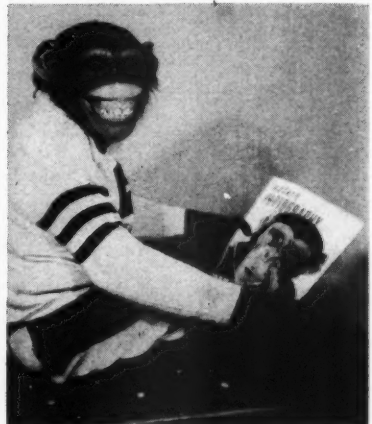
Miller at work

fied that its photographer had been found. In September he reported for college at Bethany. This month he was formally presented with the college scholarship before city and police officials at a ceremony in New York. MODERN bought in advance the picture story of his first year's work in college.

The check will help Melvin through his first year. The story will appear late in 1953. In the meantime, wanted: three more colleges to offer similar scholarships for next year and the succeeding two years so PAL youngsters with a talent for photography will have one chance per year to go to college.

EVERYBODY READS IT . . .

Last September, MODERN ran a cover photograph of a chimpanzee by David Peskin because the editors thought that it would be nice to look at a face other than a pretty girl on the cover. A flood of reader mail indicated that we were right, wrong, that the cover was funny, ugly, interesting and horrible. One



Narcissus complex?

reader, however, found it more to his liking than any other. Photographer Arthur Mann happened to be present when the chimp was perusing MODERN. We like to think that the provocative smile was caused by an item in *Coffee Break* but there's no accounting for a chimpanzee's sense of humor.

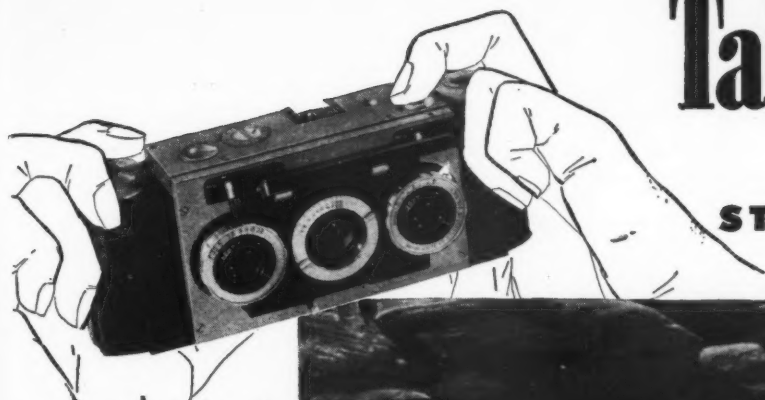
SOMETHING NEW . . .

It has just begun with New York's Metropolitan Camera Club Council. The boys and girls at the council wanted a new way to choose the four best prints of the year from among the winners of the monthly black-and-white council competitions of the past year. These monthly competitions involve over 3,000 prints annually from the 116 clubs participating in the council.

The council invited a group of people whose business is the daily critical analysis of photographs to judge the winners. The results—the Critics' Awards. The first awards, given to the following photographers, were presented at the annual dinner of the Metropolitan Camera Club Council. (Continued on page 16)

Take it easy

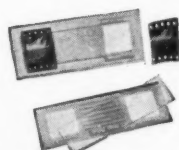
WITH
STEREO-REALIST



A WINNER!

"Navajo Milkmaid" by Conrad Hodnik, Chicago. Honor acceptance, Second International Exhibition of Color Stereo Slides and Blue Ribbon at 1950 Lighthouse of the Blind Salon.

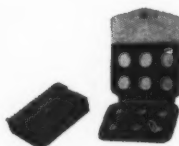
REALIST ACCESSORIES MAKE STEREO EASIER



PERMAMOUNTS—Specially designed for protection and viewing; 3 window sizes and spacing pre-adjusts slide and eliminates need for projector adjustments. Sturdy plastic-glass combination is resistant to breakage. Easy to assemble.



PERMAMOUNT MOUNTING KIT—Consists of three major items needed for mounting. Permamounts: clear plastic sorting tray, accurate film cutter, and tweezers. Compactly packaged in sturdy box for convenient storage.



FILTER KIT—Matched pairs of Type A conversion, haze and flash filters. Absolutely parallel and without prism for perfect stereo. Top grain leather cover. Individual items may be purchased separately.



TAKING beautiful three-dimensional pictures in *full natural color* is amazingly easy with the Stereo-REALIST. The printed reproduction above cannot begin to do justice to stereo. You have to see Mr. Hodnik's prize-winning stereo slide in a REALIST viewer to grasp the roundness of people and animals, the accurate color of the costumes and rocks, the depth and sharpness of the entire scene.

This precision-built American camera *exactly* reproduces what you see with your eyes. People who never before handled a

camera of any kind find it simple to take good pictures with a REALIST on their very first roll of film. The REALIST does the work . . . they get the full enjoyment of thrilling, lifelike depth and realistic color.

If you haven't discovered the excitement of REALIST pictures, ask your camera dealer to show you some. Then you'll see for yourself how you, too, can "take it easy" with the REALIST. DAVID WHITE COMPANY, 379 W. Court St., Milwaukee 12, Wisconsin.

STEREO Realist

THE CAMERA THAT SEES THE SAME AS YOU

Cameras, Viewers, Projectors, and Accessories are products of the David White Company, Milwaukee 12, Wisconsin.



prepared liquid
chemicals are
pre-test controlled
for salon quality

YOU CAN DEPEND ON FR ALWAYS—for each and every FR photo chemical you use is pre-test controlled... each and every one guaranteed to produce finer results... each and every one designed to help you enjoy greater pleasure in photography. And if you want to know why FR deserves to be the only chemicals you use, write for a copy of the story of FR Chemicals and their Pre-Test Control.

NOW!
DEVELOP AND TONE PRINTS
IN ONE SIMPLE OPERATION



No longer a complicated process to tone prints—because all you do is (1) develop in Develop-chrome, (2) rinse, (3) fix. It's as easy as black and white. In red, blue, yellow, sepia, green from which an unlimited variety of tones can be made.



NEW

Large sizes illustrated 99c each
Small sizes illustrated 39c each

THE FR CORPORATION, 951 BROOK AVENUE, NEW YORK 56, N. Y.



*Give Yourself the
Lifetime Gift of*
INDEPENDENCE
as these Graduates did...
through **NYI** *training!*



"I started my studio with less than \$100. I have found the field wide open for good, progressive photographers."

NYI Graduate—
A.E. WOOLLEY, JR.
owner of Woolley
Photographic Stu.,
Baton Rouge, La.
(Aug., 1951)



"I grossed \$106 the first week and business has grown steadily better. My NYI training has certainly paid off."

NYI Graduate—
N. C. BUCHNER
owner of Buchner's
at Brookside, Tulsa,
Okla. (Mar. 1951)



"Business is too good. My biggest headache is finding time to handle orders that are piled high. Yours is the finest course available."

NYI Graduate—
YERNA DONALD
owner of Donald's
Studios, New Westminster, B.C.
(Sept., 1952)

NYI HOME STUDY TRAINING Leads Quickly to Your Success in Photography — as a Career, for Spare-Time Earning, or as a Profitable Hobby

The New Year is a time for good resolutions. The better future you want can begin today. Resolve to stop wishing and **DO** something about your desire to get into the glamorous, well-paid, and always exciting field of professional photography. Enroll **NOW** in the world-famous NYI Home Study Course. Follow the lead of thousands of home-trained NYI graduates who have made good as news and magazine photographers, in Hollywood, in commercial and portrait studios — in every money-making phase of photography. Hundreds of others like those pictured on this page have won independence and regular substantial incomes. What they have done — **YOU** can do!

BIG FREE BOOK GIVES FULL FACTS

NYI's colorful, illustrated book gives you a complete picture of photography and the increasing opportunities in it for **YOU**. It explains how you can **EARN WHILE YOU LEARN** — how you can start a business in your own home — how to get good paying jobs in top-flight studios. Resolve to give yourself the gift of a happy, prosperous future in whatever you want to do in photography. Act **NOW**! Mail coupon **TODAY**!



NEW YORK INSTITUTE OF PHOTOGRAPHY
Dept. 117, 10 West 33 Street, New York 1, N. Y.



One of AMERICA'S
OLDEST and LARGEST
PHOTOGRAPHY SCHOOLS
Leadership since 1910

RESIDENT TRAINING

Visit, write or phone our Resident School if you prefer **On-the-Spot** training. Complete facilities include 14 studios, 18 streamlined labs, glamorous models, and the finest, up-to-date speedlight and color equipment. Day or night classes. Full or special Short-Term Courses. Deferred payment plan.

APPROVED FOR VETERANS

NEW YORK INSTITUTE OF PHOTOGRAPHY

Dept. 117, 10 West 33 Street, New York 1, N. Y.

Please send me complete information regarding

☐ Correspondence Course ☐ Resident Training

Name

Address

City Zone State

☐ Check if Korea Veteran



YOUR BEST SHOTS BEGIN WITH

The New *Elgeet*

75mm f:2.9 TELEPHOTO LENS

You're missing half the fun and a lot of wonderful shots if you don't have an Elgeet 75mm (3") f:2.9 Cine-Tel* Telephoto Lens for your 16mm camera. Just think of the scenes you can bring up close—sports, stage shows, celebrities, landscapes—shots you couldn't get without the 3X magnification of this powerful lens.

Close-ups of the children can be completely natural and unposed—they won't even know you're taking the picture. It's perfect, too, for studies of flowers and insects—acts like a microscope when used close to your subject. Fully color corrected for razor sharpness and brilliant pictures. See this remarkable lens at your dealer's today!

Only \$63.45 (tax included)

Send for your free copy of the valuable booklet "Exciting Movies With Elgeet Lenses." It will help you get better pictures.



Elgeet OPTICAL COMPANY, Inc.
834 SMITH ST., ROCHESTER, 11 N.Y.

MAKERS OF
The World's Finest Lenses

COFFEE BREAK

(Continued from page 14)

Nov. 10, by Jacquelyn Judge, *Editor, MODERN PHOTOGRAPHY*: Leo Lerch, Manhattan Camera Club; William Berriel, Hypo Hounds; Levon Roubian, Pictorial Photographers of America; Harry Sheridan, Fresh Meadows.

Other critics who assisted in judging the first awards were: Bruce



LEO LERCH

Critics liked it

Downes, *Editor, Photography*; Ed Hannigan, *Managing Editor, U. S. Camera*; Jacob Deschin, *Camera Editor, New York Times*. It is expected that there will be other additions to the critics' panel before next year's judging.

IT ALL BEGAN . . .

Almost two years ago MODERN published a provocative picture section called *Where Was the Photographer?* We got the idea for the section from a remark made by one of the editors. He looked at a picture by a then unknown-



E. A. HEINIGER

Well, where was he?

to-us Swiss photographer, E. A. Heiniger, and asked "Where was the photographer?" We looked for more pictures that might elicit the same question. And then we looked for E. A. Heiniger. What we found out about Mr. Heiniger plus a selection of his really fine work begins on page 42.

ONE LAST PRODUCT . . .

After last month's odd photo items, we decided to let sleeping dogs lie . . . but . . . we couldn't help ourselves. After making our sterling resolution, the following announcement was received by our New Products editor and we print it without a single change: "Styletone, Inc., Chicago manufacturers, have introduced a fabulous line of satin sheets and matching pillow cases made of finest acetate satin. No oriental prince or harem favorite ever slept in such splendor. The ultimate in sophisticated sleeping luxury, these sheets induce healthy, blissful, natural rest and are available in an exotic range of colors, which include:

Passion Purple
Arabian Gold
Heavenly Blue
Forbidden Green
Blushing Pink
New Orleans Rose
Bridal White
Sable Black

"Sold in leading stores at \$10 per sheet and \$5 per pillow case, the gift box in which they are packed is a satin replica of a savage African tiger skin in colors of Arabian Gold and Sable Black."

We phoned up our favorite leading photographic store to order a few dozen Passion Purple sheets but it seems the store was either fresh out of them or never carried them at all. No accounting for stores these days.

COMING NEXT MONTH . . .

• If you'd like to get unusual, pictorial or just plain self-satisfying pictures in color at night, a 6-page feature on this subject will be your meat. With photographs by amateurs, high school boys and professionals—and we'll bet you won't know which background resulted in which picture!

• The second in our new enlarging series, following up *Enlarging From A to Z*, this issue, p. 54. The second article discusses completely the answers to the following questions: Why are there four contrast grades of enlarging paper? How do you know which one to use for a particular negative? How do you use it? All this presented in simple, readable style.

• A new look at movie composition by Peter Gowland. A famous professional gives you useful hints for using a compass and ruler to improve your movie making.

• A photobiography describing the work and approach of Bill Brandt, the Englishman called by many "the photographer's photographer."

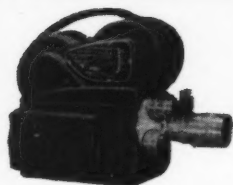
Dowling's

FIFTH AVENUE

10% DOWN

LIFETIME GUARANTEE

• POSTAGE AND INSURANCE FREE ON SHIPMENTS THE WORLD OVER
• EASY PAYMENTS FOR BOTH SERVICEMEN AND CIVILIANS



AURICON Cine-Voice

You can produce 16mm talking pictures the Hollywood way! While "shooting", the Cine-Voice camera simultaneously photographs a sound track along one film edge. The film cost, black and white or Kodachrome, is identical to silent types. Magnetic striping is not required, saving you both time and expense. Best of all, the processed film plays perfectly lip-synchronized on any 16mm sound projector! Compact and easy to operate—either from house current or portable power pack—your Cine-Voice outfit is furnished complete with amplifier, microphone, headphones and case: Everything needed to open a new world of sound pictures. Standard "C" mount lenses only are optional. Write for free Auricon brochure or order today!

Single Lens Model.....\$695 Cash or \$69.50 Down
3 Lens Turret Model.....\$784.50 Cash or \$78.40 Down

Exakta VX



The outstanding 1953 Exakta brings these notable advances: Pre-set diaphragm control • Cartridge-to-cartridge film feed • Hinged back • Film speedometer • New improved Carl Zeiss Lenses.
With new Zeiss Tessar coated f/2.8 lens \$269.50 Cash or \$26.95 Down.
With new Zeiss Biotar coated f/2.0 lens \$343.00 Cash or \$34.30 Down.

Selected Exakta VX Accessories

Eveready Leather Carrying Case..... \$12.00
Exakta BC Flash Unit..... 17.45
Copy Mat, Complete..... 97.50
Retrofocus 35mm f/2.5 lens..... 216.50
Biotar 75mm f/1.5 lens..... 149.50
Angenieux 90mm f/1.8 lens..... 199.50
Tele-Magor 400mm f/5.5 lens.....

Please write Dowling's Fifth Avenue for Comprehensive List of Exakta VX Accessories.

Linhof



4 x 5
Super
Technika
Including Multifocus
Rangefinder and Xenar
coated f/4.5 lens.
\$375.75 Cash or
\$37.57 Down. Other
lenses and Linhof "23"
also available.

Pacemaker



"45"
SPEED
GRAPHIC
With Ektar coated f/4.7
lens \$224 Cash or
\$22.40 Down. Write for
Graphic folder!

HASSELBLAD



Superlative single lens
reflex with Ektar Ctd.
f/2.8 lens \$499.50 Cash
or \$49.95 Down.

Rolleicord



With
Schneider
Xenar
coated
f/3.5 lens \$149.50 Cash
or \$14.95 Down. In-
cludes improved "Snap-
it" case. Request com-
plete Rollei accessory
list!

Rolleiflex



With
Xenar
coated
f/3.5 lens \$265 Cash
or \$26.50 Down; or
with Zeiss Tessar coat-
ed f/3.5 lens \$285 Cash
or \$28.50 Down. Car-
rying case included.

POLAROID Land CAMERA



Standard
model 95 is
\$89.75 Cash
or \$8.97
Down; or
new model 110 of the
"print-in-a-minute" cam-
era with coupled range-
finder, high speed shutter
and Ctd. f/4.5 lens is
\$249.50 Cash or \$24.95
Down.

NewSUN LITE



Tube designed for 10,
000 flashes. Dry battery
needs no charging.
Complete outfit with
batteries, flash tube
weighs only 5 lbs.
\$79.50 Cash or \$7.95
Down.

MINOX



Just 2 1/2 ozs., 3" long...
yet with precise shutter
speeds to 1/1000 sec. and
Ctd. f/3.5 lens. Including
case and carrying chain
\$129.50 Cash or \$12.95
Down.

NIKON



With Nikkor Ctd. f/2.0
lens \$259. Cash or
\$25.90 Down; or with
Nikkor Ctd. f/1.4 lens
\$349. Cash or \$34.90
Down. Write for list of
Nikkor lenses for Leica
and Contax!

Leica III f



With Elmar Ctd. f/3.5
lens \$278.80 Cash or
\$27.88 Down; with Sum-
mitor Ctd. f/2.0 lens
\$384.20 Cash or \$38.42
Down; or with Summarit
Ctd. f/1.5 lens \$469.20
Cash or \$46.92 Down.

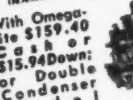
Veigel

EXACT
66
ENLARGER



With amazing new built-
in rangefinder, and
Schneider Ctd. f/4.5 lens.
Perfect companion for
your Rolleiflex \$169.50 Cash
or \$16.95 Down.

SUNNY Omega D2



With Omega-
lite \$159.40
Cash or
\$15.94 Down; or Double
Condenser
Model
\$168.50 Cash
or \$16.85
Down; Lenses
optional.
Copy attach-
ment \$34.20;
Colorhead \$15

Dowling's

Mail Order Division
175 FIFTH AVE., NEW YORK 10, N. Y.
ORegon 4-6275

Please ship the following immediately:.....
Enclosed is \$..... as Down Payment or Complete Payment.
(Cross out one)
I agree to pay \$..... Monthly for..... Months until merchandise is paid for.
Please give top Trade-In Offer on.....
and apply as down payment when I accept your offer.
☐ Send Illustrated Literature On.....
☐ Send Illustrated Catalog ☐ Send Pamphlet on "Deferred Payments"

Name.....
Address.....
City..... Zone..... State.....

ALL EQUIPMENT LISTED IS BRAND NEW—FACTORY PACKED. OUR STOCKS OF BOTH USED AND NEW EQUIPMENT ARE HOWEVER MOST EXTENSIVE. PLEASE WRITE FOR ANYTHING PHOTOGRAPHIC



Now you can *Aim your hopes Higher...*

Travelers
will thrill at the "reach"
of the Telephoto Lenses
that bring distant,
inaccessible subjects into
working range... thanks to
rapid interchangeability
of the lenses.

Illustrators
will like the quick
interchangeability of the
roll-film magazines...
permitting the use of
different film emulsions,
color or black-and-white
in one camera.

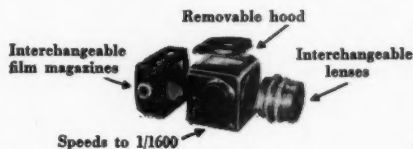
Photo-reporters
will be quick to exploit
the dazzling 1/1600
top speed of the
HASSELBLAD... excited
at the prospect of freezing
action at angles too
difficult for slower shutters.

Naturalists
will appreciate the close-
working sharpness of the
matchless Ektar f/2.8 Lens...
focusing down to 20 inches
without accessories...
and to full scale with
extension tubes... and with
no worry about parallax.



Photographers are a hopeful breed... with a sharp look-out for the better camera coming just around the corner. Today, here's one good reason why you can aim your hopes higher — your hopes of better pictures with finer equipment: It's the new $2\frac{1}{4} \times 2\frac{1}{4}$ HASSELBLAD Camera. For here is an instrument, precision-crafted in Sweden, with built-in refinements that will bring a new range, a new sureness to your picture making. Interchangeable film magazines, interchangeable lenses, automatic controls, speeds to 1/1600 second, built-in flash — these are but a few of the HASSELBLAD features that extend the technical limits of today's photography.

Prices — The camera, with 80mm Kodak Ektar f/2.8 Lens and $2\frac{1}{4} \times 2\frac{1}{4}$ roll-film magazine, \$499.50. Accessory 135mm Kodak Ektar f/3.5 Lens, \$285, and 250mm Zeiss Opton Sonnar f/4 Lens, \$439. Prices include Federal Tax.



HASSELBLAD

The New
Swedish Reflex Camera



Write for the descriptive
HASSELBLAD booklet to

Willoughbys

Dept. M, 110 West 32nd Street New York 1, N. Y.



Prominent Picture Takers

RAVE ABOUT THE NEW
35MM *Voigtlander*

PROMINENT

All of the Voigtlander ingenuity, engineering skill and craftsmanship have gone into creating this newest of miniature cameras designed to take INTERCHANGEABLE LENSES.

It has a telemeter-finder (viewfinder and rangefinder in one unit) coupled with the lens . . . and a shutter setting which is coupled with film winding. One operation winds film and shutter mechanism. No blanks — no doubles. Its

eye-level operation facilitates speedy shooting.

The handsome, sturdy die-cast PROMINENT, with genuine leather covering and rich chrome trim, is equipped with the famous Ultron f2 lens, assuring you of a sparkling quality never before obtainable. Has Compur Rapid M-X FULLY SYNCHRONIZED shutter and built-in self-timer. Takes sharply outlined pictures with electronic flash at 1/500th second.

Mail orders filled. Liberal trade-in allowance. Time payments on local and suburban sales, if desired.

With f2 Ultron lens
in Compur Synchro Shutter
\$225.00

With f1.5 Nokton lens
\$275.00

Carrying Case
\$12.50

Willoughbys
WORLD'S LARGEST CAMERA STORE

110 West 32nd Street • 113 West 31st Street
New York 1, N. Y. • Longacre 4-1600

NOW! with **FULL** synchronization
... at no increase in price!



Voigtlander
BESSA I

With Vaskar f4.5 Coated Lens
in Prontor SV Synchro Shutter

\$59⁵⁰

Synchronized for all speeds



All the famous features have been retained and, in some cases, improved! Buy one for yourself or let us put one away for a gift. You never bought more camera value for so little.

IT'S A DOUBLE-DUTY BEAUTY:

Takes 8 Full Size 2¼" x 3¼" or
16 Half-Size 2¼" x 1¾" Pictures
on Standard 120
Black-and-White or Color Film!

PLUS . . . THESE IMPORTANT FEATURES:

- Optical Direct Vision Finder, Parallax Corrected
- Built-in Self-Timer
- Depth-of-Field Guide
- Double-Exposure Prevention

Mail orders filled. Add postage.

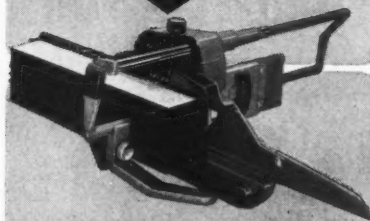
Willoughbys

WORLD'S LARGEST CAMERA STORE

110 West 32nd Street
113 West 31st Street
New York 1, N. Y.
LONGacre 4-1600

Announcing
NEW! NEW! NEW!

GoldE



**INDEX 2X2 SLIDE
CHANGER
MANUAL MODEL**

The GoldE Manual Index, for all GoldE Manumatics and adapted for most other 2x2 slide projectors, offers all features of GoldE Automatic Changer, gives operator complete manual control of 40 slides in sequence, in any type mount. Also selects, skips, repeats, rejects, goes backward or forward—fingers never touch slides. Insert file in changer and you're set to show!

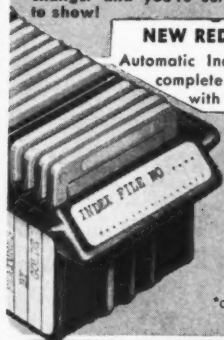
Adapted for
YOUR Projector

\$17.50

Complete with
GoldE Neva-Warp®
Index File

NEW REDUCED PRICE!

Automatic Index Changer,
complete
with file..... **\$22.50**



**GoldE
INDEX FILE**
PROTECTS • PROJECTS
40 2x2 slides. Neva-Warp® construction. Complete with changeable description labels. **\$1.50**

*COPYRIGHT

**GoldE
INDEX
FILE CASES**

Two convenient sizes—four and six file models. Smartly designed. Exclusive GoldE Balance-Case® Diagonal Handle.

4-File Case (Holds 160 2x2 Slides)
Complete with 4 files..... **\$9.00**
Case Only..... **\$4.00**

6-File Case (Holds 240 2x2 slides)
Complete with files..... **\$14.00**
Case Only..... **\$6.00**

NEW! LIBRARY STYLE CASE—with 12 files capacity. 960 2x2 slides. Dust-Trap construction. Each file in its own compartment. Lift-off hinged door. Exclusive nesting feature for neat stocking.

Complete with 12 Index Files..... **\$25.00**
Case Only..... **\$10.50**

Write TODAY for free, illustrated literature.

At better camera dealers everywhere.

GOLDE MFG. CO.



**Brightest Name
in Slide Projection**
4888 N. CLARK STREET
CHICAGO 40, ILLINOIS

© COPYRIGHT 1953

behind the scenes

news of the photo industry

Back to business

The Universal Camera Corp., manufacturers of still and movie cameras and projectors, has been out of business for some time as anyone trying to get an odd-sized Universal film for his Universal camera must know.

But don't throw that camera out the window yet. The company has been reorganized. Sales, service and repair departments have been opened in New York and a factory in Massachusetts. The old tools, dies and patents of the old company are now owned by the reorganized group.

The new company has announced that it is making available immediately all the films sold by the old company.

Straws in the wind

To appear on the market in the near future: At least three more stereo cameras, all making 35mm, 23 x 24mm pairs; a 35mm single lens reflex camera taking sequence pictures via a spring motor, an ultra speed lens for 35mm cameras with an opening greater than f/1.

We regret we can supply no more information on these items for the time being. All are in process of testing or planned manufacture. When available, we'll let you know.

The Japanese approach

The Japanese magazine, *Camera World*, expressed surprise recently at the differences between camera prices in Japan and elsewhere.

In America, say the editors, popular box cameras can be bought for the same price as a steak dinner. Box cameras in Japan, however, they continue, are not in favor. Although box cameras, even in Japan, are less expensive than more complicated items, the Japanese public does not take to them. This is attributed to the vanity of the Japanese photographer who doesn't like to associate himself with box cameras but would rather have no camera at all. The editors favor the manufacture of a box-type camera with a f/3.5 lens and speeds to 1/100th as the solution.

But the installment plan has just hit the Japanese photographic industry. Whereas countless American families live in partially paid for houses, watch a partially paid for television set, and drive a partially paid for car, most Japanese evidently do not. The ice however has been broken, according to *Camera World*. An Osaka department store has recently caused quite a stir by offering to sell cameras on an installment basis. Retail shops, says *Camera World*, are faced with the necessity of adopting this system if they wish to sell high priced equipment.—THE END

you'll be
**KING
of 35 mm
COLOR**



*with
the
New*



l.i.l.i.l.i.
\$49.95
complete with
lamp and case
(inc. F.E.T.)
A royal
value!

CORONET

America's finest
**200 Watt BLOWER COOLED
2 x 2 Slide Projector**

Just in time for Christmas!

Years-ahead styling—4" F.3.5
anastigmat coated lens—
brilliant, true-color projection—Uni-built cover case—
plus a score of other exclusive
GoldE features!

At your dealer now!
FREE! Write for Bulletin No. 529
GOLDE MFG. CO.



**Brightest Name
in Slide Projection**

4888 N. CLARK STREET
CHICAGO 40, ILLINOIS

A HANDY FILM
STORAGE CHEST

AT

**NO COST
TO YOU!**



**Compeo
Reel
CHEST-PAK**
PAT. PENDING

When you buy your reels and cans this new convenient way, you're getting a genuine plus value. The Compeo Reel Chest-Pak is a sturdy, fiber board storage chest containing six sets of Compeo, Spring-clip reels with cans. There's an index printed on the chest, and individual can labels are included to give you a complete film storage and filing unit.

You get all this for the price of the reel and can sets alone. The storage chest costs you nothing.

Now at Your Dealers

Compeo
CORPORATION

2251 W. ST. PAUL AVE., CHICAGO 47, ILL.

New products

Graflex 22, 2 1/4 x 2 1/4 Camera

This 2 1/4 x 2 1/4 twin lens reflex camera has much in common with the late model Ciro-flex it replaces, but several important changes have been made: The focusing knob movement has been reversed so that now the lens is moved forward by turning the knob clockwise; the flash gun clips into a shoe on the camera, and as it clips on contact is made; an improved loading mechanism has been added.

The camera is equipped with a coated three-element 85mm, f/3.5 Graflex Graftar taking lens, made by Wollensak; the Century self-setting



type shutter has five speeds from 1/10 to 1/200 plus Bulb and Time. It also features built-in flash synchronization for class M, F, or X lamps, built-in field lens, viewing lens with speed of f/3.2, focusing range from 3 ft. to infinity, depth of field scale, a 3X built-in magnifier for critical focusing, and a sports finder. Of all-metal construction, the camera is available in black or grey. Price \$89.50; leather case \$8.50; Jen B-C Flash designed for the camera \$14.95. For more information write:

GRAFLEX, INC.
ROCHESTER 8, N. Y.

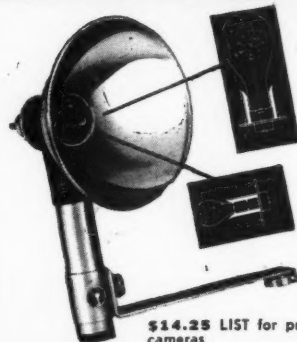
Lenses To Fit Leica, Canon

Two more Japanese lenses for Leica and Canon camera owners are now available. The 90mm, f/4 Sola with stops to f/16 and focusing range from 3 1/2 ft. to infinity; and the 135mm f/3.8 Arco Colinar with stops to f/22 and focusing range from 5 ft. to infinity. Both lenses are coated, automatically
(Continued on page 29)

DOUBLE
YOUR
HOBBY PLEASURE
with the famous

**PRACO
DUO-FLECTOR
FLASHGUN!**

Most Sensational Advance In
Flash Gun Design In Years!



\$14.25 LIST for pre-sync
cameras
\$15.45 LIST for non-sync cameras

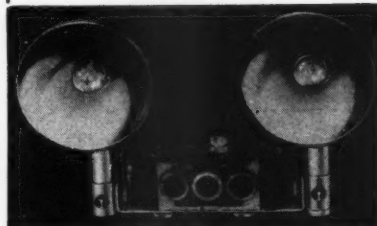
AMAZING PATENTED ADJUSTABLE
SOCKET INSTANTLY TAKES EITHER
STANDARD OR MIDGET-SIZED BULBS...
WITHOUT THE USE OF ANY ADAPTER!

IMPORTANT! SOON AT YOUR DEALER'S...
THE SENSATIONAL NEW
PRACO POCKET FLASH!



Special Note For
**STEREO-REALIST
OWNERS!**

Sensational New
**PRACO STEREO-REALIST
DOUBLE-FLASH**
\$29.50 LIST



Includes two DUO-FLECTOR Flashguns, color-ordinated by connecting cord. Great for color shots. Scientific side-mounting prevents "pink-eye" or light reflections in eyes.

ALSO: PRACO STEREO-REALIST
SINGLE-FLASH \$15.05 List
ASK YOUR DEALER TO DEMONSTRATE

Remember: There's a
PRACO Flash For Almost
Every Camera!
Write for FREE Catalog and
FREE booklet: Flash for Fun!



PRACO PHOTO PRODUCTS CO. INC.
2286 Amsterdam Ave., New York 33, N.Y.

FOR THE FIRST TIME ANYWHERE!!!

PEERLESS CAMERA Introduces & Offers...

World's only Automatic FLASH Exposure Meter



NORWOOD FLASHRITE

Take the *GUESS* work Out
of FLASH PHOTOGRAPHY...

and... At the Amazingly
LOW PRICE of . . .

12⁹⁵

Postpaid

Expose every flash shot perfectly... quickly... easily, with the Norwood Flashrite — the flash exposure meter that never makes an error. Automatically — no matter what bulb and film combination you are using — the Norwood Flashrite determines the correct exposure for you to use. No longer do you have to concern yourself with guide numbers and complicated methods of determining exposures for flash — for with just a simple setting of a dial and a sight at your subject, the perfect exposure for that shot is determined. Nothing could be simpler or more accurate!

IT'S AS SIMPLE AS A B C WITH YOUR FLASHRITE!

- A. Set computer dial for your film speed and flash bulb type.
- B. Focus through Flashrite window, turning computer dial.
- C. Set your camera at the indicated lens opening.

PEERLESS CAMERA STORES

415 LEXINGTON AVENUE • Corner 43rd Street
Opposite Grand Central Terminal N.Y. 17, N.Y. • MU 7-1000

Turn Page for More PEERLESS Values!

Mail this COUPON today

PEERLESS CAMERA STORES
415 Lexington Ave., N.Y. 17, N.Y.

Send me NEW Norwood Flashrites,
that guarantee me perfect flash pictures every
time, @ 12.95 each. If I am not completely
satisfied, I will return it within ten days for
MY MONEY BACK IN FULL, including postage.

Enclosed is \$.....

☐ Check ☐ Money Order ☐ C.O.D.

Name.....

Address.....

City/Town.....

State.....

SAVE \$19.00! DEMONSTRATOR MODELS!
GOLDE Nu-Manumatic
2x2 SLIDE PROJECTOR
 2x2 and Bantam Slides
 Tower Cooled
 100 Watt Lamp
 Coated
 16 lbs.
 List \$58.50! **39.50** Ship. Wt. 16 lbs.
LA BELLE "500" 2x2 SLIDE PROJECTOR
 List \$95.00! **59.50** Used
 • Automatically feeds, changes, re-locks slides
 Ship. Wt. 8 lbs.

SAVE \$95.00! BRAND NEW! Famous!
 German Imported
PEERLESS
 Single-Lens
 Precision 2 1/4 x 2 1/4 REFLEX CAMERA
 Pro-Test Auto-Diaphragm,
 COATED f2.5 ZEISS TESSAR LENS
 List \$285.00! **189.50** Ship. Wt. 8 lbs.
 • Speeds from 1 to 1/1000 sec.
 • Full flash synchronization
 • Built-in Self-Timer
 • Interchangeable Lenses

SAVE \$29.90! USED! 2 1/4 x 2 1/4
CIROFLEX "D"
 TWIN-LENS REFLEX
 Coated f3.5 Lens
 List \$87.90! **58.00** Ship. Wt. 8 lbs.
 • Single-lens Focusing
 • Speeds to 1/200 Second
 • plus "T" and "B"
 • Synchro-Shutter

SAVE \$17.00! BRAND NEW! Latest Model!
PEERLESS RIVAL '35'
EXCLUSIVE
 Now Only **32.50** POST-PAID
 List \$49.50!
 • Coated f3.5 Lens
 • Film speeds to 1/200 sec.
 • Built-in Self-Timer
 • Body Shutter Release
 • Double Exposure Prevention
 • Accepts standard 35mm Color and B & W Film

PEERLESS End-of-Year

EVERY ITEM PRICED FOR FAST SALE!

LEICA - CONTAX KINE CAMERAS

Model	NEW	USED
LEICA A, f2.5 Elmar	37.95	
LEICA STANDARD, f2.5 Elmar	52.95	
LEICA D, f2.5 Elmar	77.95	
LEICA II, f2.5 Summar	99.50	
LEICA IIA, f2.5 Elmar	119.50	
LEICA IIB, f2.5 Summar	137.95	
LEICA IIC, f2.5 Elmar	259.00	139.50
LEICA IIC, f2 Summaritar		350.00 179.50
LEICA IIC, f1.5 coated Summar	434.00	289.50
LEICA IIF, f2.5 coated Elmar	378.00	
LEICA IIF, f2 coated Summaritar	384.20	
LEICA IIF, f1.5 Summar	469.20	
LEICA IIF, f2.5 coated Elmar	509.00	
NIKON, f2 coated	359.00	177.95
NIKON, Ctd. f1.4	349.00	227.95
CONTAX I, f2.8 Tessar	67.95	
CONTAX I, f2 Summar	87.95	
CONTAX II, f2 Summar	135.95	
CONTAX III, f2 Summar	167.95	
CONTAX III, f1.5 Summar	187.95	
CONTAX IIA, f2 Summar	444.00	239.00
CONTAX IIA, f1.5 Summar	488.00	279.00
CONTAX IIA, f2 Summar	490.00	295.00
CONTAX S f2, Biotar	197.95	
ZEISS TENAX, f2.5 coated	66.00	40.95
KINE EXAKTA I, f2.5 Tessar	87.95	
KINE EXAKTA I, f2 Biotar	137.95	
KINE EXAKTA II, f2.5 Tessar	112.95	
KINE EXAKTA II, f2 Biotar	189.00	157.95
KINE EXAKTA V, f2.5 Tessar	199.50	149.50
KINE EXAKTA V, f2 Biotar	219.50	179.50
KINE EXAKTA VXL, f2 Biotar	345.00	
EXA, f2.5 coated Elmar	89.75	62.95
EXA, f2.5 coated Tessar	119.75	88.95
CONTAX IIA, f1.5 Summar	534.00	325.00

TELEPHOTO LENSES for LEICA - KINE - CONTAX

Critically tested, these lenses to be of excellent quality, comparable to much higher priced models. Fully coated, focusing scale with depth of field indicator. Made in Japan. Each lens FULLY GUARANTEED by Peerless. Chrome polished brass mounts. Ship. Wt. 3 lbs.

FOR LEICA (couple to Leica Rangefinder)

Model	BRAND NEW	Clearance Price
90mm f4.5	44.98	
135mm f2.8	51.99	

FOR KINE EXAKTA Bayonet Mount

Model	BRAND NEW	Clearance Price
90mm f4.5	37.79	
135mm f2.8	44.98	
40mm f2.5	44.98	

Reflex Cameras

Model	List Price	Used
KODAK REFLEX, f2.5	137.50	59.50
BRAND NEW! Famous! 2 1/4 x 2 1/4 REFLEX with f3.5 Coated Lens, FLASHGUN & CASE	62.40	35.95
COMPANION, f2.9 Trioplan	49.50	
ROLLEICORD, f4.5 Triotar	49.50	
KODAK REFLEX II, f2.5	161.00	84.50
ROLLEICORD, f2.5 Triotar	119.50	59.50
AUTOMATIC ROLLEIFLEX, f3.5	295.00	169.50
ROLLEICORD, f4.5 Triotar	75.00	47.00
CIROFLEX, f2.5	74.98	44.50
ROLLEICORD IIA, f2.5 Zeiss	89.50	
ROLLEICORD, f2.5 Xenar	99.50	
CIROFLEX, f2.5 Rapax	99.40	49.50
MASTER REFLEX, Built-in Flash, f3.5 Primosar	183.00	149.50
AUTO ROLLEIFLEX, f3.5 Tessar	235.00	129.50
ANSCO AUTO REFLEX, f2.5	155.00	99.50
Zeiss IKOFLEX III, f2.8 Tessar	139.50	
IKOFLEX IIA, f2.5	176.00	109.50
ARGOFLEX, f4.5 Lens	39.50	29.50
CIROFLEX II, f2.5 Rapax	117.35	79.50
VOIGTLANDER BRILLANT, f2.5 Compur Rapid	95.00	25.00
ROLLEICORD III, f3.5 Triotar		99.50

Roll Film Cameras

Model	List Price	Used
KODAK DUO 620, f2.5	52.50	29.00
KODAK TOURIST 620, f4.5	71.00	39.50
KODAK MONITOR, f4.5 Lens	57.50	39.50
PERKO I, f2.5 Skopar Lens	Spec.	35.50
KODAK MEDALIST, f3.5, RF		89.50
VOIGTLANDER BESSA 44, f4.5	49.50	29.50
ZEISS SUPER IKONTA BX, f2.8	281	124.00
VOIGTLANDER BESSA II, 130, f2.5 Scopar, RF	124.50	79.50
BESSA 120, f4.5	69.00	34.50
ANSCO SPEEDEX, f4.5	45.00	22.50
ZEISS SUPER IKONTA A Special, f2.5 Monor, RF	162.00	69.50
ZEISS SUPER IKONTA B, f2.8 Tessar, RF	149.50	95.00
KODAK MEDALIST II, f3.5 Ektar, Flash Supermatic	304.75	157.50

35mm Cameras

Model	List Price	Used
CLARUS "35", f2.8	116.25	42.50
WELTINI 35mm, f2.8 Tess RF	106.50	49.95
TENAX I, f2.5 Monor	66.00	24.50
KODAK 35, f2.5, RF	64.50	24.50
BOLSEY B2, f2.5, RF	73.50	46.89
METZUR II, f2.5	82.50	24.50
RETINA II, f2.5 Xenon	197.70	89.00
KODAK BANTAM SPEC, f2 Ektar, RF	125.00	79.50
ARGUS C2, f2.5, RF	Spec.	19.95
ROBOY II, f1.9 Xenon	Spec.	79.00
BOLSEY, f2.5, RF	69.50	39.50
KODAK "35", f4.5 Lens	Spec.	22.00
MINOX II, f2.5 Lens	Spec.	59.50
CONTESSA "35" f2.8 Tessar, RF		119.50
RETINA IIA, f2.5 Xenon, Auto-Wind, MX Full Synch.	164.10	119.50
BUSCH VERASCOPE, f2.5, Built-in flash	269.50	189.50
KODAK POINT 135, f4.5, Lens	33.75	24.50
KODAK "35", RF Model, f2.5	86.50	24.50
STEREO-REALIST, f2.5, Built-in flash	159.00	104.50
KODAK SIGNET "35", f3.5 Ektar, Built-in flash	92.50	64.50
ROBOY I, f2.5, quick sequence	49.50	
ROBOY II, f2.5	94.50	
SIGNET 35 Kodak, f2.5, RF	92.50	64.50
TENAX II, f2.5 Summar, RF	99.50	
VITESSA, f2.5, RF	159.50	119.50
WELTINI, f2.5 Xenon, RF	79.50	
RETINA II Kodak, f2.5, RF	69.50	
ARGUS 21, f2.5, Markfinder	42.10	39.95
BANTAM FLASH Kodak, f4.5	56.00	37.50
BOLSEY C, f2.5	109.50	79.50
DOLLINA II, f2.9, RF	49.50	
EXTRA Kodak, f1.9, RF	198.00	
IKONTA 35 Zeiss, f2.8	120.00	74.50
KARAT II, f2.8 Xenar, RF	39.50	
KAROMAT II, f2.8 Xenon, RF	164.10	119.00

TELEPHOTO LENSES (continued)

CTD. TELE & WIDE ANGLE Aux. LENSES For ARGUS C3, SIGNET, BOLSEY B2

With Case

Adapt to Camera with no additional Accessories - Precision Made

2 for 14.95 each • 24.95

8mm Movie Cameras

Model	List Price	Used
KODAK BROWNIE, f2.7 lens	43.00	29.50
BELL & HOWELL SPORTSTER, f2.5 lens	89.50	69.50
CINE KODAK 20, f2.5 Lens	29.50	19.50
BELL & HOWELL COMPANION, f2.5 lens	77.00	49.50
CINE KODAK MAGAZINE 90, f1.9	174.50	89.50
CINE KODAK 60, f1.9	89.95	49.50
DeJUR EMBASSY, f2.5	106.95	59.50
CINE KODAK 25, f2.7 Kodak	48.23	29.95
REVERE MAGAZINE THREE LENS TURRET, 60, f2.8 B&H		
1 1/2" f2.5 Wollastock Tele. 7mm f2.5 Wide Angle Lens	218.25	125.00
REVERE 8 MAGAZINE 70, f1.9 lens	124.50	69.00

16mm Movie Cameras

Model	List Price	Used
BELL & HOWELL 70-DA, 1" f1.9, 17mm f2.7 Wide Angle, 6" Telephoto	425.00	239.50
REVERE, Turrot, 1" f1.9, 17mm f2.7 Wide Angle, 3" Telephoto	295.00	169.00
REVERE MAGAZINE Turrot, f2.8	157.50	99.50
BELL & HOWELL AUTO-MASTER, TURROT MAGAZINE, f1.9	274.95	139.50
KEYSTONE A7, 1" f1.9	109.50	59.50
CINE KODAK MAGAZINE, f1.9 lens	175.00	79.50
BELL & HOWELL AUTOLOAD, 1" f1.9	214.00	99.50

16mm Sound Projectors

Model	List Price	Used
KODASCOPE FSIOM, 750 W	500.00	149.50
AMPRO STYLIT, 750 Watt	399.50	279.50
VICTOR 40, 750 Watt	295.00	119.50
VICTOR 34, 750 Watt	235.00	99.50
NATCO MODEL 3015, 12" Speaker, 750 Watt	479.00	149.50
BELL & HOWELL 138, 750 Watt, 2" f1.6	298.50	139.50
BELL & HOWELL 179, 750 Watt	579.00	259.50

SAVE \$30.25! Used
POLAROID Camera
 "Picture-in-a-minute SENSATION"
 Coated Lens - Takes 3 1/4 x 4 1/4 Pictures
 List \$89.75! **59.50** Ship. Wt. 10 lbs.
 • Built-in Flash Synchronization
 • Focuses from 3 1/2 Feet to Infinity
 • Easy to Load - Easy to Use

SAVE UP TO \$7.50! ON FAMOUS MAKE
EXPOSURE METERS
 Demonstrator Models
WESTON MASTER II
 EXPOSURE METERS
 • High & Low Light Scales
 List \$27.40! **21.95** Ship. Wt. 3 lbs.
 Demonstrator EXPOSURE METER VALUES!

Model	List	Now
G.E. BW-39	19.95	15.95
NOVOROD Director	22.95	24.95
G.E. PB-1	29.50	21.95
WESTON	18.25	14.45

Average Shipping Wt. 3 lbs.

SAVE \$30.50! Used
35mm ARGUS C-3 Outfit
 CASE & FLASHGUN!
 Complete
3900 Ship. Wt. 8 lbs.
 List \$48.50!
 • Coated f3.5 lens
 • Shutter speeds to 1/300 sec. Synchroized
 • Clip-on Flash Attachment & Genuine Leather Eversharp Carrying Case

SAVE TO \$112.43! BRAND NEW!
Bell & Howell AUTOLOAD
 16mm Magazine Movie Camera
 Coated f1.9 B & H Super Compur Focusing lens
 List \$214.95! **142.50** Ship. Wt. 10 lbs.
 • Shutter speeds 16 to 64 frames/sec.
Now! B & H AUTOMASTER
 • Coated f1.9 B & H Super Compur lens
 • 3-lens turret
 List \$274.95! **179.50** Ship. Wt. 11 lbs.
 Both Guaranteed For Life by Bell & Howell!

SAVE \$2.70! BRAND NEW!
PEERLESS EXCLUSIVE
MAGNAR "66"
Condenser ENLARGER
 For Negatives from 35mm to 2 1/4 x 2 1/4!"
 With! • 3" f4.5 lens
 Paragon Lens
 Condenser Assembly
 Plus! • 2" x 2" Glassless Value \$39.65!
 Negative Carriers
 And! • Sturdy Baseboard
 Tilt-head for
 Distortion Control
 Built-in Red Filter, ship. wt. 20 lbs.
26⁹⁵

SAVE \$40.45! BRAND NEW
EICOR 115
TAPE
RECORDER
8450
 List \$144.90!
 Ship. Wt. 25 lbs.
 • Records & Plays at 7 1/2" per second
 • Fast forward & Rewind speeds
 • Complete with microphone & Case

SAVE \$44.50! BRAND NEW! Famous!
THRIFT-LITE AC-45
Electronic Flash Unit
 PLUS \$24.50 BATTERY-PACK
 List \$84.00!
39⁵⁰
 Ship. Wt. 12 lbs.
 • AC or Battery Operation
 • 1/1000 sec. flash duration

UNUSUAL VALUE!
 2 1/4 x 3 1/4"
Anniv. SPEED GRAPHIC
 with f4.5 Kodak Lens
 • Cph. KALART RANGEFINDER
 • Spacod FLASHING
109⁵⁰
 Ship. Wt. 8 lbs.

Storewide CLEARANCE

BUY NOW WHILE PRICES ARE LOWEST!

Slide Projectors

	NEW	USED
SKAN 200, blower, VIEWLEX APS, 2 1/4 x 2 1/4" Projector and Case, Used	39.50	24.50
LABELL 200, Fully Automatic, KODAK MERIT, f13.5, 150 W	45.00	37.50
KODAK 2A, 150 Watts, 5" x 7"	24.10	20.95
VIEWLEX V33, f13.5, 300 watt, blower, 62.48		
ARGUS P100, f13.5 lens	29.95	23.95
LA BELLE 301, Automatic, 5" lens, 300 Watt	125.00	68.50
TDC RN, 5" lens, 2 1/4 x 2 1/4" and 3 x 3, with case	64.50	38.95
GOLDEX REFLEX, 2 1/4 x 2 1/4" x 2x2, watt, blower	86.50	58.50

Strobe • Flash

	List Price	Sale Price
STROBE FLASH UNITS		
DORMITZER M107, demon-	112.30	57.50
EPCO PD 40s, demonstrators, with Batt. & Chgr.	140.00	105.00
WILCOX P2, demonst., portable, with Batt. & Chgr.	161.50	113.50
CELUK SM2, demon. port.	97.00	59.50
MELAND MR2, demonst., 1/2500 sec.	82.50	47.50
STROBE RESEARCH MP100, complete slave unit for photo-cell oper., demonst.	192.50	154.50
ADD-A-FLASH, demonst., Batt. & Chgr.	120.00	59.50
POWELL STROBE, demonst.,	121.25	69.50

Press Cameras

	List Price	Used
PRESS CAMERAS		
4 x 5 CROWN GRAPHIC, f4.7 Raptor, Kalart RF	235.00	134.50
2 1/4 x 3 1/4 ANN. SPEED GRAPHIC, f4.5 Raptor, Kalart RF, Flash Unit		109.50
4 x 5 BUSCH PRESSMAN, 135mm f4.7 Raptor, Kalart RF, NEW	205.79	129.50
2 1/4 x 3 1/4 PACEMAKER SPEED GRAPHIC, 101mm f4.5 Ektr, Kalart RF	269.50	149.50
2 1/4 x 3 1/4 BUSCH, 101mm f4.5 Raptor, Kalart RF	133.40	74.50

SAVE UP TO \$76.39! BRAND NEW!
4x5 PACEMAKER GRAPHIC Outfit
 with Ektalite-Screen • Graflok Back
 only
219⁵⁰
 Value \$297.89!
 Ship. Wt. 29 lbs.

COMPLETE OUTFIT INCLUDES:
 • 135mm f4.7 Cld. Wollensak Raptor Lens
 • Coupled Kalart RF - Installed
 • 3-cell Press Gun, Reflector, Cord, Solenoid - Installed
 • Lens-Hood, Filter Holder, 4 optical glass filters
 • 4 x 5 Graphic Film-Pack adapter
 • 4 x 5 Graphic cut film holder
 • Press Carrying Case

4 x 5 PACEMAKER SPEED PRESS OUTFIT 269⁵⁰
 Same features & accessories as above. Value \$342.24!

ENLARGERS

BRAND NEW!
 FEDERAL 470, 5 1/2" Double Condenser Lens 4 x 5
109.00 79.95
 FEDERAL 311, Condenser System, 3 1/2" f4.5 lens, to 2 1/4 x 3 1/4 Neg.
69.25 49.95
FEDERAL 269, 2 1/4 x 3 1/4 3 1/2" lens, 39.75 29.75
DEMONSTRATORS
 ELWOOD 52, up to 3 x 7" Negatives
69.00 49.95
SOLAR 120, 3 1/2" f4.5 to 2 1/4 x 3 1/4 neg. **94.50** 63.25
 DeJure II, to 2 1/4 x 3 1/4 Neg. Double Cond., 3 1/2" f4.5 lens **99.50** 74.50
 DeJure I, to 2 1/4 x 3 1/4 Neg. Double Condenser, 3 1/2" f4.5 lens Distortion Control **126.50** 92.00

USED
 OMEGA DII, to 4x5 neg., Double condenser, w. lens. **211.50** 139.50

BINOCULARS

BRAND NEW!

	List Price	Sale Price
7 x 35 MEGAPHOS, Center Focus, 4 with case	49.00	39.95
9 x 25 CHALLENGER, Center Focus, with case	41.75	24.95
16 x 50 SWIFT, Center Focus, 4 with case	75.00	48.95
7 x 50 FUJI, Ind. Focus, 4, with case	75.00	36.95
8 x 25 ARISTOCRAT, Center Focus, with case	39.75	24.95
3 x 27 HARVARD, Center Focus with case	26.00	14.95
10 x 35 NORMANDIE, Center Focus, case	69.50	46.95
10 x 35 COLMONT, Center Focus, case	109.50	49.95
9 x 35 ROSS, Center Focus, 4, case	189.00	145.95
6 x 30 ILE DE FRANCE, Central Focus, 4	41.75	39.95
8 x 32 ILE DE FRANCE, 4	92.50	59.95
USED		
3.5 x 15 ZEISS THEATIS, Center Focus, 4, with case	110.00	66.44
Add 20% Excise Tax!		

2 1/4 x 3 1/4 CENTURY GRAPHIC, 103mm Trioptar, f4.5, Flash Unit, Hugo Meyer RF
184.60 127.50

2 1/4 x 3 1/4 CENTURY GRAPHIC, 103mm f4.5 Trioptar Spec. 72.50

2 1/4 x 3 1/4 BUSCH PRESSMAN, 101mm f4.5 Raptor, Kalart RF, Flash Unit, NEW
211.95 129.50

SYMBOLS:
 4 Coated Lens
 * Flash Shutter
 RF Coupled Rangefinder

PEERLESS EXCLUSIVE
JUST OUT! SAVE \$18.50!
 The NEW, Sensational, German-Import
RIVAL Roll-Film
620 ROLL-FILM CAMERA
 f4.5 Coated Lens
24⁹⁵ Value \$43.50!
BRAND NEW
 Ship. Wt. 4 lbs.

Order today... present supply is limited
 First Come... First Served!

• Built-in flash synchronization.
 • Takes eight 2 1/4 x 3 1/4 inch pictures OR 16 1 1/4 x 2 1/4 pictures.
 • Speeds to 1/200 Second

SAVE \$35.00! Used. FAMOUS
REVERE 88
8mm MOVIE CAMERA
 Coated f2.5 lens
 • Speeds from 8 to 32 Frames per Second
 Parallax Corrected Optical Viewfinder
37⁵⁰ Ship. Wt. 4 lbs.
SAVE \$40.00! REVERE 99
 • 34 Lens f2.8
 • Coated f2.8 Lens
 • 2 Viewfinders
59⁵⁰ List \$99.00!
 Ship. Wt. 8 lbs.

10-DAY TRIAL with FULL MONEY-BACK GUARANTEE! 1 FULL YEAR OF SERVICE
 All items offered subject to prior Sale! Add Estimated Shipping Costs. We'll Refund every cent not used. If you prefer C.O.D., please send 10% Deposit!
 PRICES SUBJECT TO CHANGE WITHOUT NOTICE!

PEERLESS CAMERA
JUST OUT!
CATALOG

NEW, Sensational, 92-Page Peerless Catalogue!
WORLD'S MOST COMPLETE LISTING OF PHOTOGRAPHIC EQUIPMENT!
 Complete with Every top-quality Camera and Accessory... as well as: Tape Recorders, Binoculars, Scientific Instruments and helpful Photo-Hints.
 ONLY 10c A COPY You get 25c back on first purchase!

PEERLESS CAMERA STORES
 415 LEXINGTON AVENUE, NEW YORK 17, N. Y.
 OPPOSITE GRAND CENTRAL TERMINAL MU 7-1000

PEERLESS CAMERA STORES
 Dept. M-1, 415 Lexington Avenue, N. Y. 17, N. Y.

☐ I WANT TO BUY.....

☐ If not completely satisfied, I will return your shipment within ten days for MY MONEY BACK IN FULL, including postage.

☐ I WANT TO TRADE. Rush best offer for my.....

☐ Please send your NEW 90-PAGE ILLUSTRATED PHOTOGRAPHIC CATALOGUE. Find 10c enclosed. I understand I will get 25c back on my first purchase!

SPECIAL INQUIRY SECTION For items NOT LISTED in this ad.

I am interested in a..... (Description in Detail—Model #, Lens, etc.)
 I want to spend \$.....

NAME.....
 ADDRESS.....
 CITY/TOWN..... STATE.....

*You Haven't Really Seen Your Slides
Until You've Used The*

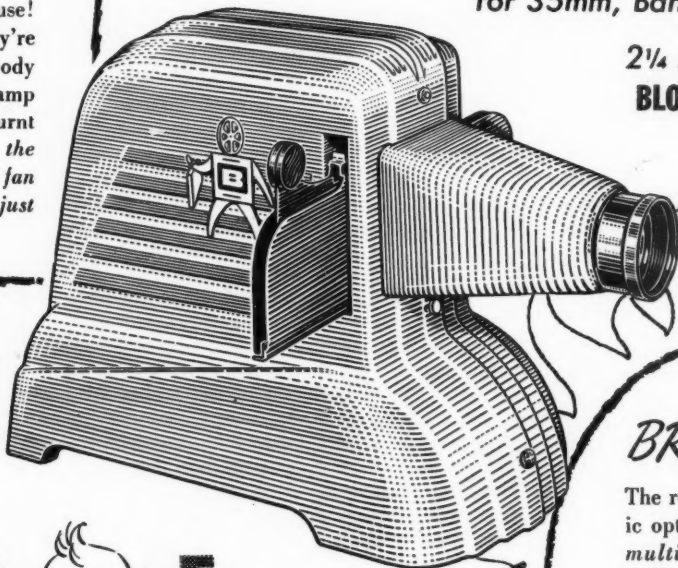
New **BRUMBERGER** Versatile 300 Watt **Slide PROJECTOR**

for 35mm, Bantam and

2 1/4 x 2 1/4 Slides
BLOWER-COOLED

It's COOLER!

So cool, you can even sit on it — after hours of use! No fried slides — they're actually kept *below* body temperature! Longer lamp life . . . safe — no burnt fingers! And, unless the high-powered cooling fan is switched "ON", you just can't project!



*And It's
So EASY...*



Even a child
can operate
the lightweight
Brumberger Versatile

Slide Projector — with vertical and horizontal tilts, vernier lamp adjustment — interchangeable slide carriers that snap into place . . . and it's so simple to change the lamp or clean the condensers!

Order Today From Your Dealer!

\$69⁵⁰

Tax incl.

INCLUDES LAMP & CHOICE OF SLIDE CARRIER FOR 2" X 2" OR 2 3/4" X 2 3/4" BINDERS EXTRA SLIDE CARRIER.....\$3.95 CASE.....\$9.95

See these famous BRUMBERGER Slide Products at your dealer!



SLIDE BINDERS

All steel with glass. For Bantam, 35mm and 2 1/4" transparencies. They're economical . . . snap together and apart for use over and over again. In small and large packages.

SLIDE FILES

All steel, individually or group partitioned. Handy, handsome and sturdy . . . they're made in all popular sizes at popular prices. Complete with handle and snap locks.

SLIDE VIEWER

Versatile illuminated table viewer, for 35mm, Bantam and 2 1/4" transparencies. Brilliant enlarged image, automatic slide centering device. **ONLY \$46.50**

Write For Free Catalog

BRUMBERGER
34 Thirty Fourth St. • Brooklyn 32, N. Y.



Dad's for STEREO...



STEREO VIEWER

Here's the most brilliant, sharpest 3-dimensional image ever—with the touch of a button light switch! Precision engineered of colorful, lightweight Polystyrene (practically unbreakable), with optically ground lenses and pin-point focusing. Luxuriously styled, yet amazingly low priced! Takes standard 1 1/4" x 4" mounts.

#1265 Viewer (No batteries)
ONLY \$9.95

STEREO BINDERS

The easiest-to-use, most accurate binder made! Transparencies automatically centered and aligned between glass in all steel frames... no kits, masks or tape required! Accurately spaced prongs hold transparencies in perfect alignment. Simple snap assembly... can be used over and over again.

#1166 Binders 24 sets
ONLY \$4.50

STEREO FILES

Protect and file your slides in handy sequence. Portable, handsomely finished steel.

#1115 holds 115* metal or glass slides and your viewer\$6.50
#1116 holds 150* metal or glass slides (no viewer compartment)\$6.50
#1111 single-tier file holds viewer and 50 metal or glass slides in group compartments, or up to 125 cardboard mounts.\$3.95

* Holds twice as many Ready Mounts



Family Favorites...



Mom takes
MOVIES...

REEL CHESTS

All-steel, for filing and storage of your valuable films. A touch of the tab moves the selected reel forward automatically.

#1008.....12 - 8mm. 200 ft. reels & cans.....\$6.50
#1009.....12 - 8mm. 300 ft. reels & cans.....\$7.50
#1010.....12 - 8mm. 400 ft. reels & cans.....\$7.95
#1016.....9 - 16mm. 400 ft. reels & cans.....\$7.50

REELS & CANS

Handsome oven-baked grey enamel finish. Reels marked at 50" intervals. Cans ribbed for stacking.

ITEM No.	SIZE	REELS	CANS
#1018	8mm. 200 ft.	.45	.45
#1019	8mm. 300 ft.	.55	.55
#1020	8mm. 400 ft.	.55	.55
#1024	16mm. 200 ft.	.45	.45
#1026	16mm. 400 ft.	.55	.55

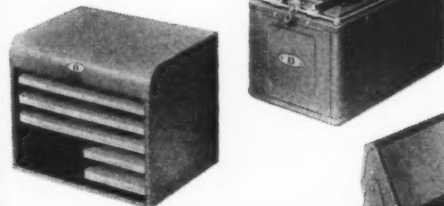
... perfect for TAPE RECORDINGS, too!



...the

BRUMBERGER

Equipment Family!



Junior's a
DARKROOM fan...

DARKROOM SAFELIGHT

Versatile, 5" x 7", all steel. Use as retouching stand, viewer, etc. With bulb, cord, switch and amber filter.

#1860\$5.95
Extra red, green, amber, clear or ground glass filterseach 98¢

MASTER PHONES

Convenient communication between darkroom and other rooms, up to 100 feet apart. Uses standard flashlight batteries. Complete with wire, instructions and guarantee.

#211 Phones (less batteries)....\$7.50

PAPER SAFES

Sturdy, all-steel, handsome finish. Ingenious door opens easily, closes automatically.

#1810 has 3-8"x10", 4-5"x7" shelves\$10.95
#1814 has 4-11"x14" shelves, 1 extra deep 11"x14" shelf\$19.95

CONTACT PRINTER

Precision built, all-steel, finger tip control. Split cover with continuous hinge. Opal glass offers perfect light diffusion with no hot spots. Accurate margin adjustments. Supplied with red bulb.

#1057\$22.00



write for FREE CATALOG!

They're All For BRUMBERGER

34 Thirty Fourth St.
Brooklyn 32, N. Y.

Abe Cohen's Exchange

LAST MINUTE GIFT SUGGESTIONS

Save \$48.50 on Like New Latest Model 2 1/4 x 3 1/4 Zeiss
SUPER IKONTA C
WITH COMPUR RAPID MX FULL SYNCHRO SHUTTER
If new \$198.00
ONLY \$149.50

- Zeiss Tessar Opton F3.5 lens
- Coupled range finder
- Eveready Leather case
- 8 or 15 pictures on roll

SAVE \$268.00 on LIKE NEW 35mm CONTAX S
with Eye Level Focusing, PRE-SET DIAPHRAGM

With Coated Zeiss Biotar F2 lens, built-in flash synchronization, self-timer, shutter speeds from 1 second to 1/1000th. With LEATHER EVEREADY CASE.
List Price \$477.50 complete **\$209.50**

Save \$238.50 on Latest Model **CONTAX IIA**
Reg. \$488.00 **ONLY \$249.50**

- Coated Zeiss Sonnar F1.5 lens
- LEATHER EVEREADY CASE \$10.00

Many other Contax cameras and lenses in stock. Write if the one you want isn't listed.

SAVE \$40.50 NEW 2 1/4 x 3 1/4 ZEISS IKONTA C
(1951 model)

With Coated Zeiss Tessar Opton F3.5 lens, compur rapid synchro shutter, leather Eveready case.
(8 pictures on 120 film) **special \$84.50**

SAVE \$81.50 ZEISS CONTESSA '35'
Only 1 with MX FULL SYNCHRO SHUTTER PLUS EVEREADY CASE
With coated Tessar Opton F2.8 lens, coupled rangefinder, built in electronic exposure meter.
If new \$226.00 **ONLY \$144.50**

GIVE YOURSELF A FINE LENS THIS CHRISTMAS

15mm Kodak Ektanon F2.7 ctd lens for 16mm Magazine Cine Kodak (demonstrators)	Reg.	SALE
5cm Leitz Summarit F2 coated lens for Leica, used, but like new	\$59.00	\$47.50
5cm Zeiss Sonnar F2 uncoated for Contax, used	187.00	97.50
40mm Schneider F4.5 wide angle lens for Contax S or Kine Exakta, new	58.75	47.50
90mm Sun F4 coated Telephoto for Kine Exakta or Contax S with free leather case, special		48.50
135mm Zeiss Triotar F4 coated lens for Kine Exakta, new		59.50
*135mm Sun F3.8 coated Telephoto for Kine Exakta or Contax S with free leather case, special		59.50

*This is a new Japanese lens, exquisitely mounted in lightweight satin finish chrome with leather trimmed barrel—composes favorably with lenses costing much more.

STAR D Multicam TRIPODS
Made of aluminum and chrome plated steel
3 section pan head. Fits all 8 and 16mm cameras. 35mm and press cameras up to 5x7
Reg. \$15.40 **SALE \$11.95**

Prices Slashed! NEW FEDERAL ENLARGERS

MODEL 269 — (compact Store-away model) For 35mm to 2 1/4" x 3 1/4".	Reg.	SALE
With 3 1/2" F6.3 lens	39.75	29.95
MODEL 135 — (compact Store-away model) For 35mm and Bantam films.		
With F4.5 lens, double condenser	44.95	37.50
Case for either of above	7.25	5.95

Similar savings on other models

SAVE \$130.50 on Like New LEICA IIC
Formerly \$350 **SALE \$219.50**

- With Coated Summarit F2 lens
- Coupled range finder
- Speeds from 1 sec. to 1/1000th
- Leather Eveready Case

FOR THE LEICA

SIMS FLASH GUN, for Leica IIC or earlier models	Reg.	SALE
35mm SUMMARON F3.5 coated wide angle lens for Leica, latest, like new	\$28.50	\$11.95
90mm ELMAR F4 coated telephoto for Leica, chrome lightweight, latest, like new	122.40	69.50
135mm Hektor F4.5 coated light-weight, chrome, like new	132.60	74.50
	165.00	109.50

Many other Leica Specials in stock

SAVE \$20 on NEW 35mm ARGUS C3 OUTFIT

- With Coated F3.5 lens
- Flash gun
- Leather case
- Coupled rangefinder

INCLUDES

- New Telephoto lens
- 2 Filters (your choice)
- Adapter Ring
- Sunshade

Reg. \$95 **COMPLETE \$74.50**
CAMERA and FLASH GUN less accessories \$62.50

SAVE \$18.00—BRAND NEW BOLSEY B2 FLASH CAMERA OUTFIT
Reg. \$7.50 **SALE PRICE \$79.50**

- Bolsey B2 35mm Camera
- 2 Standard Filters—your choice of colors
- Bolsey Flash unit
- Carry All Gadget Bag
- Lens Hood & Filter Holder

REDUCTIONS ON BRAND NEW MISCELLANEOUS ACCESSORIES

4x5 FR adjusting cut film tank	\$9.00	\$7.20
4x5 Compco all metal printer	special	\$3.30
Premier 2 surface dryer	special	\$2.20
#2 changing bag	special	\$2.20
8x10 Metal paper safe	10.95	4.25
12" Premier Trimmer with guide	7.90	3.99
Gralab Automatic Darkroom Timer	21.95	18.99
G.E. Luminator Timer with alarm	10.50	8.95
Kodak 11x14 adjustable easel	special	8.95
Kodak adjustable safelight lamp	7.40	5.95
Kodak 35mm Dayload tank	9.30	7.50
Rex 2 1/4x2 1/4" Hand Viewer	5.50	3.95
Brumberger Electric 2x2 or 2 1/4x2 1/4" table viewer	6.50	4.95
Filter special Ser. V-3 optical glass filter	7.75	5.75
Slip on adapter ring to accept above filters, specify lens diameter	special	.95
Filter special Ser. VI, as above	8.50	6.50
Adapter ring to accept above (specify lens diameter)	special	1.25
Kobal Tilt Head	special	1.50
Praxsira range finder with case	4.70	
Kobal self timer for Leica and other cameras	2.95	

Save \$15.55! Demonstrators! GOLDE NU-MANOMATIC 2 x 2 SLIDE PROJECTOR

- Blower-Cooled
- 300 Watt Bulb

List \$58.50! **42.95**

SAVE \$10.00 on New Lightweight 2 1/4 x 2 1/4 Voigtlander PERKEO I
Reg. \$49.50 **ONLY \$39.50**

- Coated Vaskar F4.5 lens
- 12 2 1/4x2 1/4 pictures on roll
- Pronto synchro shutter
- Speeds from 1/25 to 1/200

New Late Model VOIGTLANDER BESSA I
2 1/4 x 3 1/4 Roll Film Camera
Has coated Vaskar F4.5 lens in Pronto S shutter, built-in flash and built-in self timer. Speeds from 1 second to 1/250th.
Reg. \$59.50 **only \$47.50**

2 GREAT GIFT ITEMS KODAK CAMERA OUTFITS BROWNIE HAWKEYE FLASH OUTFIT
only \$13.50

Brownie Hawkeye Camera, takes 12 2 1/4 x 2 1/4 pictures in color or black and white on 620 film. Includes Kodalite Flash Holder with batteries, 8 Flash Lamps, 2 rolls V620 film, booklet and instruction manual. Packed in attractive carton.

KODAK DUAFLEX FLASH OUTFIT
only \$22.50

Kodak Duaflex II Camera, with Kodak F8 lens, takes 12 2 1/4 x 2 1/4 pictures on 620 film in black and white or color. Includes Flash Holder with batteries, 8 Flash Lamps, 2 rolls V620 film, booklet and manual.

Give Yourself A Christmas Gift Save \$31.55 on Brand New CIROFLEX MODEL E WITH LEATHER EVEREADY CASE
Reg. \$126.05 **SPECIAL \$94.50**

- Coated Rapar F3.5 lens
- Rapax synchro shutter
- Speeds from 1/10 to 1/300th

BRAND NEW, FAMOUS MAKE 35mm IMPORTED GERMAN CAMERA
F3.5 Coated Lens with Genuine Pronto S Flash Shutter
Worth \$50.00
\$32.50

BIG SAVINGS ON IMPORTED BOWER FLASH GUNS
High quality flash unit for cameras with built-in flash. Available in two models... for domestic shutters (Kodak) or for foreign shutters (Compur, Pronto, etc.)
Includes battery case, midjet bulb reflector, cord, bracket and instruction sheet.
only \$5.95
(Postpaid)
Please specify shutter when ordering

Perfect Christmas Giving
Everyone can use a fine pair of theatre or sports glasses. A gift that will be remembered for years.
Save Up to 47% BINOCULAR SALE
Imported glasses.
Price includes case.
All plus 20% Fed. Tax.

6x15 Ultra modern glasses (illus.) Reg. SALE
last word in performance and style.
Individual focusing, compact, only 3 1/4 x 1 1/4". Pigskin case \$27.50 **\$19.75**
3.5x15 ZEISS THEATIS, coated optics central focusing, like new \$110.00 **49.50**
4x40 DIGAL sports glasses with central focusing \$15.00 **9.95**

We carry a complete selection of Zeiss, Bausch & Lomb and other fine glasses. Write for further particulars.

SPECIAL!! BRAND NEW 75mm VOIGTLANDER COLOR SKOPAR F3.5 COATED LENS IN COMPUR SHUTTER
For 2 1/2x2 1/2 cameras or for enlarging
Reg. about \$35.00 **ONLY \$15.00**
Speeds from 1 sec. to 1/500th
Focusing mount down to 1/5 feet
Limited Quantity

FOR PROFESSIONALS OR USERS OF VIEW CAMERAS SAVE \$270.50—BRAND NEW 36cm (14") VOIGTLANDER HELIAR F4.5

uncoated lens in barrel. With lens cap and flange. Perfect for 8x10 or large heads on 5x7 cameras. Ideal for portrait or group. Limited quantity makes early ordering a must.
Formerly \$350.00 **NOW \$79.50**

GIFTS FOR THE ENTIRE FAMILY
These fine demonstrator cameras and projectors provide fun for the entire family.

8mm CAMERAS and PROJECTORS

	Reg.	SALE
CINEMASTER II CAMERA, ctd. F2.5...	\$66.65	\$35.95
REVERE 55 CAMERA, ctd. F2.5 lens...	69.50	44.50
KEYSTONE K32 PROJECTOR, ctd. F1.9 DE JUR EMBASSY MAGAZINE CAMERA, coated F2.5	92.75	69.50
DE JUR EMBASSY MAGAZINE CAMERA, coated F1.9	106.95	79.50
UNIVERSAL P500 PROJECTOR	118.95	89.50
KEYSTONE R8, 500 watt projector	80.00	44.95
DE JUR 1000 watt projector case	89.75	67.50
	177.50	132.50

SAVE \$15.25 on NEW 8 or 16mm BAIA MOVIE ACTION EDITOR
Reg. \$54.75 **SALE \$39.50**
Includes Stainless Steel Splicer • Dual Purpose Rewind Baseboard and Movie Action Viewer

VEIWFSRUTDAYO WONDERFUL FOR MOVIE CAMERA OWNERS MITTENS PLT-3 MOVIE TITLER ONLY \$8.95
Kit consists of 246 large pin-in-back 3/4" letters for easy assembly. A fine inexpensive gift that will truly be welcomed.
OWNERS ROSE

ALL ITEMS SOLD F.O.B. N. Y., ADD APPROXIMATE POSTAGE. WE WILL REFUND OVERAGE.

Abe Cohen's Exchange, Inc.
"THE HOUSE OF PHOTOGRAPHIC VALUES"
142 FULTON STREET • NEW YORK 7, N. Y.



"CLIFFIE ...
**TDC MEANS
THE MERRIEST
CHRISTMAS
EVER!**"

Says
Mary Hartline,
featured
performer
of TV's
"Super Circus"



TDC ShowPak

Built into case —
it's truly portable!

A complete 300 watt blower cooled projector of ultra-modern design amazingly priced! Has 5" coated *anastigmat* lens. All metal, all typical TDC quality. Handsome lift-off case, built-in slide file. Light weight but rugged, ShowPak is ready to go, ready to show!

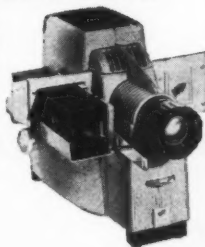
\$5450

Case Included

TDC "Streamliner 500"

Projects more light than any other make of 500 watt projector! Coated 5" f/3.5 *anastigmat* lens. Venturi-type blower cooling. With Selectron-Semimatic slide changer.

\$8450



TDC "Streamliner 300 Duo"



Projects 2 x 2" and 2 1/4 x 2 1/4" (in 2 3/4 x 2 3/4" mounts) slides. With 5" f/3.5 coated *anastigmat* lens, 2 1/4 x 2 1/4" changer.

\$6950

"Streamliner 500 Duo," with 6" f/3.5 lens, 2 1/4 x 2 1/4" and 2 x 2" changers, \$89.50.*

*F.E.T. Incl. Prices subject to change without notice.

THREE DIMENSION CO.
4555 W. Addison St.
Chicago 41, Ill.



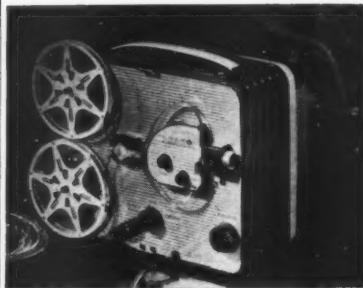
NEW PRODUCTS

(Continued from page 22)

coupled to rangefinder, and feature engraved depth of field scale, and front and rear lens caps. Price of Sola \$59.95; Arco Colinar \$66.95. For more information and a brochure, write: INTERSTATE PHOTO SUPPLY CORP. 28 WEST 22 ST., NEW YORK 10, N. Y.

Brownie 8mm Movie Projector

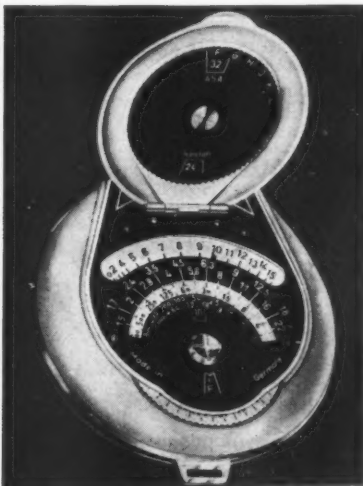
This 8mm movie projector has a single knob which can be positioned for forward projection, stills, reverse projection, or motor rewind; simplified



threading with film path printed on the plate behind the sprockets; and indirectly illuminated sprockets so projector can be threaded in the dark. It also features oil-impregnated nylon gears, finger-tip focusing lever, self-locking tilt knob, and a power fan with ventilating louvers. Price, with case \$62.50; complete with 30 inch wide Brownie Projection screen, \$67. For additional information write: EASTMAN KODAK COMPANY ROCHESTER 4, N. Y.

Bertram Chrostar Exposure Meter

The Bertram Chrostar is a three ounce exposure meter made in the U.S. Zone of Germany, which has provision



for ASA and Weston film ratings. This photo-electric cell type meter covers a range of exposures from four minutes to 1/1600 sec., stops from f/1.5 to (Continued on page 30)

PLEASE SAY YOU SAW IT IN MODERN

"AND A **TDC**
CHRISTMAS
TO YOU,
MARY...
FOR YEAR
'ROUND JOY!'"

Says Cliffie the
Clown, featured
performer
of TV's "Super
Circus"

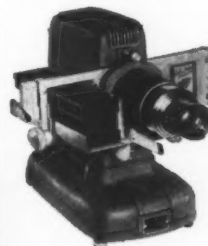


TDC Project-or-View

Projector, table viewer all in one! A finger flick converts from a projector (covering a full size screen) to a big 6 3/4 x 6 3/4" table viewer! Coated f/2.9 *anastigmat* lens. Takes 2 x 2" slides. 150 watt, AC-DC model. **\$7450**

Deluxe 200 watt model, AC blower cooled, \$84.50*

TDC Deluxe Model D

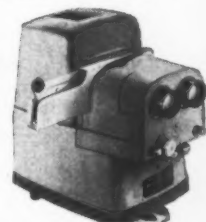


Complete with SELECTRON-Semimatic changer. 300 watt blower cooled projector 5" f/3.5 coated *anastigmat* lens, roller-bearing focus, many other exclusive quality features! **\$6950**

TDC Stereo Projector

Projects the realistic beauty of stereo slides. Matched f/3.5 *anastigmat* lenses, twin 500 watt lamps.

\$17500



*F.E.T. Incl. Prices subject to change without notice.

FREE SLIDE BOOKLET!

Information-packed guide written by
Rus Arnold, ASPA.

MAIL THIS COUPON TO:

Three Dimension Co., Dept. M.P. 1-53
4555 W. Addison St., Chicago 41, Ill.

Please rush me a FREE copy of your new booklet on slide photography and projection.

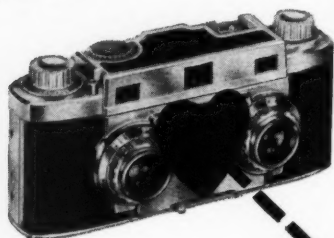
Name _____

Address _____

City _____ Zone _____ State _____

STILL ANOTHER LEADER

Revere



SELECTS
FOR ITS
NEW STEREO
CAMERA

Wollensak
MATCHED LENSES
and TWIN RAPAX
COUPLED SHUTTERS



Revere, like many other leading camera manufacturers, has found by actual tests that there are no finer lens and shutter made than Wollensak. Aside from your photographic skill you can be certain of fine pictures if your camera is Wollensak equipped.

THE REVERE STEREO LENSES are Wollensak matched 35 mm, 3 element, f/3.5 AMATON. They have the speed needed to match the action-stopping shutters. All air-to-air surfaces Wocoted.

THE REVERE TWIN RAPAX SHUTTERS are specially coupled to give *exact* shutter speeds at every setting. And one lever opens or closes both diaphragms *simultaneously*, thus assuring the very same exposures and shutter speeds for each picture. Without this precision true stereo photography would not be possible. Speeds from 1/2 to 1/200 second plus time and bulb . . . synchromatic for flash photography. Apertures from f/3.5 to f/22.

Here's a picture-taking combination that can't be beat . . . Wollensak matched lenses and twin Rapax shutters.

CINE RAPAX LENSES ARE SUPPLIED ON REVERE MOVIE CAMERAS

Raptar... *the MASTERPIECE of Lenses*

Wollensak
OPTICAL COMPANY, ROCHESTER 21, N. Y.

NEW PRODUCTS

(Continued from page 29)

f/22, and can be used for movie film from 8 to 64 frames per second. Price with lapel chain and complete instructions, \$24.95. For additional information write:

WILLOUGHBY'S

110 WEST 32 ST., NEW YORK 1, N.Y.

Brumberger Slide Projector

Brumberger's No. 1405 slide projector for 35mm, Bantam and 2 1/4 x 2 1/4 slides, is a 300 watt unit featuring vertical and horizontal tilts, vernier lamp adjustment, interchangeable slide carriers that snap into place, and a cooling fan. It is fitted with 5 in., f/3.5



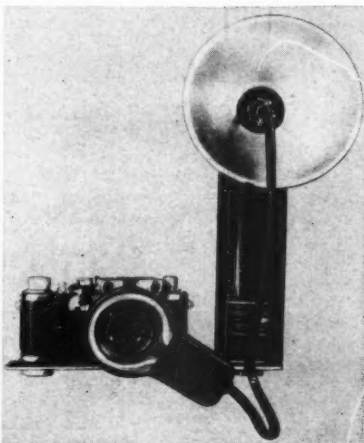
anastigmat lens in helical focusing mount. Price, including choice of slide carrier for 2 x 2 in. or 2 3/4 x 2 3/4 in. binders, \$69.50. Extra slide carriers, \$3.95, ea. Case, \$9.95. For more information and a catalogue of other Brumberger products, write:

BRUMBERGER SALES CORP.

34 THIRTY-FOURTH ST., BROOKLYN, N.Y.

Speedlight Non-Shadow Unit

Speedlight non-shadow unit is a circular light tube shielded in clear plastic which attaches directly before the camera lens with a filter adapter, and



can be used with either Speedlight Mighty Midget, or Swifty electronic flash units.

When used for close-up work (illustrated) the unit's cord plugs into the

(Continued on page 32)

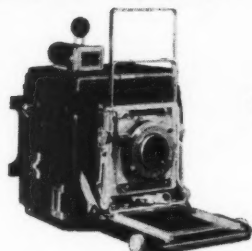
Customer Satisfaction Assured
All Merchandise Guaranteed

WESTEN'S

Buy Your Photo Needs on Our
Convenient Credit Terms

Every Item Advertised in stock • BRAND NEW • Guaranteed Deliveries

USE OUR TIME PAYMENT PLAN AND BUY Complete SPEED and CROWN GRAPHIC Outfits



Latest Models • Brand New

Listed are all items in each Graphic outfit

Size of camera and choice of lens determines price of complete outfit.

(That is, you get the complete Graphic outfit as listed to the left, and the price you pay is shown following the camera and lens you choose.)

HERE'S WHAT WE SEND YOU!

(All Items Are
Brand New!)

- Camera you select
- Coated lens of your choice
- Synchro Shutter
- Kalart Cpld. Range Finder
- Complete Flash Gun
- Graphic Film Pack Adapter
- 6 Cut Film Holders
- Sunshade
- Adapter Ring
- 4 Series VI Filters
- Deluxe Carrying Case
- 1 Package 25 shts. Cut Film
- Factory Guarantee

YOU'RE ALL SET
FOR PICTURE
TAKING

COMPLETE OUTFIT PRICES

SIZE	LENS	SPEED GRAPHIC	CROWN GRAPHIC
2 1/4 x 3 1/4	f4.5 Ektar 4"	\$319.00	\$279.00
	f3.5 Schneider Xenar	329.00	289.00
	f3.5 Zeiss Tessar	339.00	299.00
	f3.7 Ektar	339.00	299.00
3 1/4 x 4 1/4	f4.7 Schneider Xenar 5"	303.00	258.00
	f4.7 Optar 5 1/4"	313.00	268.00
	f4.7 Ektar 5"	313.00	268.00
	f4.5 Zeiss Tessar 5 1/4"	329.00	284.00
4 x 5	f4.7 Schneider Xenar 5"	308.00	263.00
	f4.7 Optar 5 1/4"	318.00	273.00
	f4.7 Ektar 5"	318.00	273.00
	f4.5 Ektar 6"	343.00	298.00
	f4.5 Zeiss Tessar 5 1/4"	334.00	289.00
	f4.5 Zeiss Tessar 6"	339.00	294.00
	f3.5 Zeiss Tessar 6"	399.00	354.00

Outfits furnished with Ektalite Screens at no charge. *With 1/800 sec. flash supermatic shutter at \$13.00 additional. All Zeiss lenses "T" coated. All Graphics with GRAFLOK backs.

3 1/4 x 4 1/4 SUPER D GRAFLEX with 6" or 7 1/2" Kodak Ektar.....\$246.75
4 x 5 SUPER D GRAFLEX with 7 1/2" Kodak Ektar.....267.25

NEW GRAPHIC CAMERAS—Boxes Only

2 1/4 x 3 1/4 Century	\$ 85.00	3 1/4 x 4 1/4 Speed	\$162.25
2 1/4 x 3 1/4 Crown	123.80	4 x 5 Crown	126.40
2 1/4 x 3 1/4 Speed	164.45	4 x 5 Speed	170.45
3 1/4 x 4 1/4 Crown	120.60	4 x 5 View #II w/case	148.50

(Customer's lens installed at no extra charge)

NEWEST GRAFLEX CAMERA

Graflex 22—2 1/4 x 2 1/4 Reflex.....\$89.50
Graflex all metal tripod.....31.50

SPECIALLENSESforGRAPHIC

90mm f6.8 Wide Angle MX synch. \$ 39.50
240mm f5.5 Tele-Xenar synch... 95.00
300mm f5.5 Tele-Xenar synch... 147.00

2 1/4 x 2 1/4 CIRO-FLEX

Another Famous Graflex Product

Model D—Alphax (1/200) M-F Shutter,
f3.5 LensReg. \$87.90 \$67.90
Model E—Rapax (1/400) M-F Shutter,
f3.5 LensReg. \$117.55 89.00

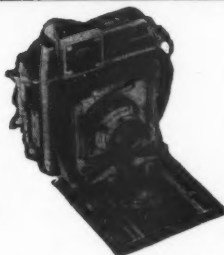
GI ORDERS GET THE GREEN LIGHT AT WESTEN'S

The Most Versatile!

Linhof
SUPER TECHNIKA 2 1/4 x 3 1/4

Complete 3 Lens Outfit

\$575⁰⁰



FEATURES

- Super Technika 2 1/4 x 3 1/4 Camera; 65mm f6.8 Wide Angle Angulon Lens; 105mm f3.5 Schneider Xenar Normal Lens; 180mm f5.5 Tele Xenar Telephoto Lens. All in fully synchronized MX Compur Rapid Shutter to 1/500 sec. All coupled to rangefinder.
- Multifocus Rangefinder
- Tilting & Swinging Back
- Revolving Back
- Triple Extension Bed
- Drop Bed
- Quick Change Lens Lock

4 x 5 LINHOF OUTFITS

(Price at right includes camera with lenses checked)

4 x 5	127mm f4.7 Xenar	135mm f3.8 Xenar	150mm f4.5 Xenar	90mm f6.8 Angulon	240mm f5.5 Xenar	360mm f5.5 Xenar	PRICE
One Lens Outfit	✓		✓				\$359.75
		✓		✓			375.75
			✓		✓		380.75
Two Lens Outfit	✓			✓			442.00
		✓		✓			458.00
	✓		✓	✓	✓		463.00
		✓		✓	✓		560.00
Three Lens Outfit		✓		✓	✓		581.00
	✓		✓	✓		✓	655.00
		✓	✓	✓	✓	✓	660.00

(All lenses coated and all shutters flash synchronized.)

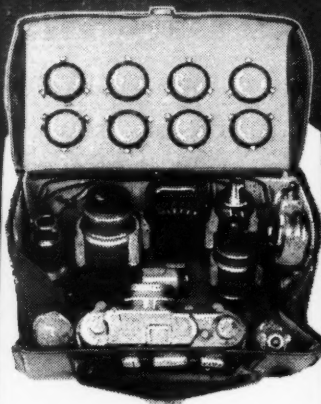
Multi-focus optical viewfinder—for 4 x 5 or 5 x 7.....\$ 94.00
3 Lens 5 x 7 Linhof outfit.....\$874.00

TRADES ACCEPTED

westen's
802 STATE STREET
TELEPHONE 2-9181 SANTA BARBARA, CALIFORNIA

• Use our easy TIME PAYMENT PLAN •

Fitting and Proper For the Finest Camera Equipment in the World



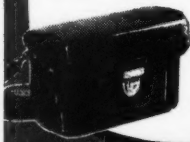
OMNICA Deluxe CASES

Each OMNICA Case has been custom designed for a specific camera and its accessories, to provide full protection against any possible damage to its contents. Each item of equipment is held securely in position, yet ready for instant use without fuss or bother. Even while the OMNICA is being 'worn' by its sturdy adjustable shoulder strap, everything within it is easily and quickly accessible. No more practical cases have ever been produced.

Made of the finest, top-grain, saddle-leather cowhide, by leather craftsmen, OMNICA Cases are masterpieces of workmanship and appearance, and worthy of the finest camera equipment in the world. Every detail has been carefully cared for: thick velvety suede leather linings and clamp coverings... solid brass fittings, zippers, and locks... overlapping construction for protection against dust and rain... ball-bearing filter clamps... plus many other appointments and design features for utmost safety and convenience.

OMNICA Cases are made in Western Germany.

There is an OMNICA Deluxe Equipment Case for each of the following Cameras and its Accessories:



LEICA, CONTAX,
ROLLEICORD,
ROLLEIFLEX, \$60
KINE EXAKTA

RETINA,
CONTESSA \$40

Ask to See the OMNICA Case for Your Camera at Your Dealer, or Write to:

KLING PHOTO CORP.
235 Fourth Avenue, New York 3, N. Y.

NEW PRODUCTS

(Continued from page 30)

Speedlight reflector socket. For use as a dual unit, a holder and cord are provided for the Speedlight's regular bulb and reflector. The manufacturer claims the following guide numbers, with either Mighty Midget or Swifty: for circular light alone, using Plus-X film, 60; Daylight Kodachrome, 11. For use as a dual unit, Plus-X film 90; Daylight Kodachrome 16. Price of circular unit \$29.95; with cord and holder for use as dual unit, \$44.95. For additional information write:

SPEEDLIGHT CENTER
128 WEST 32 ST., NEW YORK 1, N. Y.

Jen Flash for Leica IIIf

Jen B-C Pocket Flash, Model SF for the Leica IIIf is mounted in the camera accessory shoe, has a miniature connector, which doesn't interfere with the viewfinder, and collapses into a compact unit. Of all-aluminum construction, it features automatic bulb



ejector, highly polished reflector, positive bulb contact, and self-shorting extension outlet for multiple flash. Price complete with battery and carrying case, \$14.95. For additional information, write:

JEN PRODUCTS SALES CO.
419 WEST 42 ST., NEW YORK 36, N. Y.

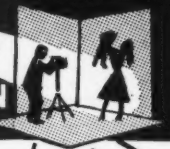
Apo-Lanthar f/4.5 Lenses

The new Voigtlander Apo-Lanthar lens is a five-element anastigmat made of new types of glass. Designed especially for color work, the lens is said to be extremely well corrected, approaching the ability of the small aperture apochromatic lenses used in photo-engraving processes. As a result, the images are remarkably clear and sharp, with both black-and-white and color films.

The f/4.5 lens comes in two focal lengths: 150mm (for 4 x 5 in. negative) in Press Compur-X synchro shutter, \$98.50; 210mm (for 5 x 7) in

Now's The Time for

**INDOOR
FOTO FUN**



Special Purchase!
**SUNRAY
ARISTOCRAT
ENLARGER**

Ideal for the beginner. Takes negatives up to 2 1/4 x 3 1/4. Complete with lens, and handy carrying case.

Reg. \$14.95

Special \$9.95

8 x 10

Easel \$3.95



**AT
FRIENDLY
fotoshop**

SPECIAL

**FOTOSHOP
"SPECIAL OF THE
MONTH"
Complete
LIGHTING
OUTFIT**

There's 2 polished 10" parabolic reflectors; 1 polished 10" bullet reflector; plus complete clamp, cord, and socket set for each reflector... as complete a lighting outfit as you can wish for... and instead of \$7.50 you pay only **\$5.49**

**SPECIAL! 3 Section Flyweight
Light Stand. Reg. \$3.95,
ONLY \$3.16**

**New FOTOLARGERS!
30% OFF!**

	For negatives to 2 1/4 x 3 1/4	Model D Dif- fusion	Model C Dou- ble Con- densers
Lens lens	\$19.95	\$25.20	\$25.20
with 3 1/2"	\$23.45	\$28.70	\$28.70
with 3 1/2"	\$21.95	\$27.27	\$27.27
Extra negative carrier each	\$2.75	\$2.75	\$2.75
Counterbalance	\$4.99	\$4.99	\$4.99

For negatives to 4 x 5

	For negatives to 4 x 5
Lens lens	\$38.15
with 5 1/4"	\$44.25
with 5 1/4"	\$41.25
Extra negative carrier each	\$4.39
Counterbalance	\$4.29

**SAVE! Complete 8MM.
MOVIE EDITING OUTFIT**



Perfect "buy" for every 8mm. camera owner. Features adjustable focusing, automatic splicer, rewinds with patented break (take up to 400 ft. reels), heatless long life 6W bulb, all metal construction. List \$29.95.

**Act Fast! Only \$16.95
complete**

SALE! ENLARGING EASELS

	Reg.	Sale
Sunray 8x10	\$4.95	\$3.95
Airoquest 4-Way	8.07	6.29
Aray 11x14	11.95	6.95

SAVE \$83.60

**Revere 16MM Magazine Turret
Camera Outfits SPECIAL**

Total List When New \$231.10 **\$147.50**
Wanted by Foto Fans everywhere... this terrific package buy includes such outstanding items as:
"Used (EQUAL TO NEW) Revere 16MM Magazine Turret Camera with f1.9 focusing lens." "New Movie Bar Light-holds two 375 w. lamps." "One Fresh Magazine Color Indoor Film." "One Magazine of New Black & White Film."

Write Today for Fotoshop Catalog
20¢ Deposit on C. O. D.'s
Please add approximate postage.
All items subject to prior sale.

"the house of personal service"

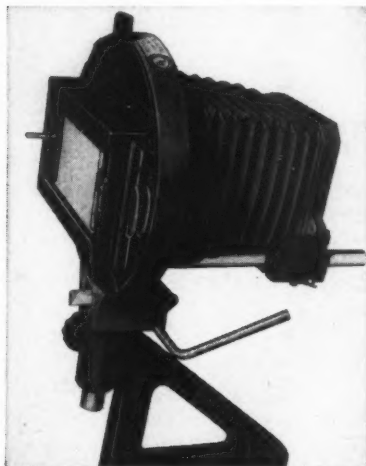
fotoshop inc.
136 WEST 32nd STREET
New York 1, N. Y. LO. 3-1973



Compound non-synchro shutter, \$169.
More information may be had from:
WILLOUGHBY
110 WEST 32 ST., NEW YORK 1, N. Y.

Testrite Copy Back

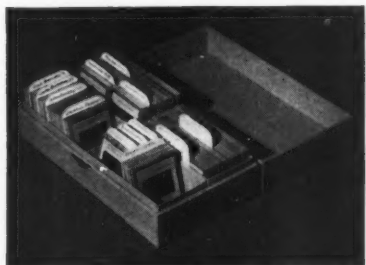
Testrite Copy Back, for all Testrite Fotolargers, converts the enlarger into a ground glass view camera, and is available for both 2 1/4 x 3 1/4, and 4 x 5



cut film holders. Made of steel finished in black crackle, the unit clips onto the enlarger, and can be revolved for 90 degrees. Price for 2 1/4 x 3 1/4 film size, \$8.95; for 4 x 5 film size, \$14.95. For more information write:
TESTRITE INSTRUMENT CO.
57 EAST 11 ST., NEW YORK 3, N. Y.

Kodak Slide File Box

Kodaslide Flexo File will hold either 360 cardboard slides, 124 glass slides, or 160 Kodak Stereo slides, and features four sections as well as 12 re-



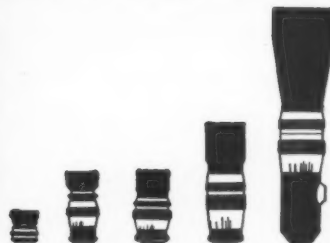
movable septums. For group titling purposes the septums are higher than the slides. Price, \$1.25. For more information write:
EASTMAN KODAK COMPANY
ROCHESTER 4, N. Y.

Albinar 135mm Lens

Made in the Western Zone of Germany, the 135mm, f/4.5 Albinar lens is adaptable to both 35mm and 2 1/4 x 3 1/4 cameras, and can be used as an enlarging lens, for the same film sizes by twisting the lens barrel and detaching it from the tube. The four-element coated lens features separate infra-
(Continued on page 34)

It's TWICE as THRILLING...

35mm Tele-photography with Kiepitt **KILAR** Lenses and Accessories



It's a real thrill to shoot a distant scene, or an inaccessible or unaware subject, and to bring it up close, in its every detail. But it is doubly thrilling when each detail is clear and sharp, and recorded with brilliant definition.

KILAR Lenses provide these qualities because of high resolving power and color correction resulting from designs which have been carefully calculated to meet the most exacting requirements imposed by the finest 35mm cameras in the world. Every KILAR Lens, before it is released for market, is first submitted to the most rigid quality control inspections, after which a test micro-plate is made with the lens and filed as a permanent record of the lens' approved performance.

All KILARS are coated, and each lens is provided with its own screw-in lens hood-filter holder. Lens mounts are made of lightweight magnesium alloys, attractively black-anodized, with brushed chrome scale rings.

KILAR Lenses are available in two types:

BASIC KILAR permits the same lens to be used with several 35mm cameras; i.e. LEICA, KINE EXAKTA, EXA, CONTAX S, PRAKTICA, CANON IV, and others, by means of a simple adapter.

KINE EXAKTA KILAR designed for use with Kine Exakta and Exa cameras, only.

KILAR Lenses in Basic Mounts fit the KILARFLEX Mirror Reflex Housing.

PRICES for Basic KILAR and Kine Exakta KILAR Lenses.

90mm (3 1/2") f3.5 Kilar...	\$ 75.00
135mm (5 1/4") f3.8 Kilar...	90.00
150mm (6") f3.5 Kilar....	97.50
300mm (12") f5.6 Tele-Kilar	130.00
400mm (16") f5.6 Fern-Kilar	240.00



The KILARFLEX MIRROR REFLEX HOUSING

gives to every Leica and similar camera the added versatility of a fine single lens reflex. Accurately threaded for the camera, the KILARFLEX is mounted to the camera as easily as a lens. The KILARFLEX accommodates all Basic Kilars, and all Leica lenses of 90mm and over. Focusing and framing is performed by viewing the up-right image, on a brilliant micro-grain plano-convex screen by means of a 5x magnifier eyepiece.

Once mounted, the camera can be revolved for vertical or horizontal pictures without changing viewing position. The picture area is clearly and accurately marked on the viewing-focusing screen for both positions.

An ingenious single cable synchronizes the action of the surface-coated reflex mirror with the body shutter release.

The KILARFLEX is an invaluable aid in scientific and medical photography, in nature and sports photography, in portraiture, in photomicrography, and in a host of other applications where it is important to observe the taking-lens-image right up to the moment of exposure.

KILARFLEX with Coupling Cable (less lens) \$ 64.80

See KILAR Lenses and the KILARFLEX at your Dealer.

Made in Western Germany

Write for FREE Literature describing the many uses for the KILARFLEX and other KILFITT Accessories.

KLING PHOTO CORP.

235 FOURTH AVENUE, NEW YORK 3, N. Y.

...The Meter the
BEST
PHOTOGRAPHERS
use...



"It is my opinion that the Norwood Meter is the best all around meter for our use. In naming some of our bigger pictures made here, 'King Solomon's Mines' and 'Quo Vadis,' which were both photographed by Robt. Surtees, he used nothing but the Norwood Meter all through both of these pictures."

John Arnold
Executive Director of Photography
Metro-Goldwyn-Mayer Pictures
Culver City, California

NORWOOD Director
Incident Light
EXPOSURE METER



With Patented
3-Dimensional
Photosphere.

John Arnold is one of the world's leading cameramen in a field where an under- or over-exposed scene may mean the loss of thousands of dollars... where there can be no compromise with quality... and only the best is tolerated. Experience has proven the Norwood Director completely accurate and reliable... the choice of the leading cameramen in the world. With its patented 3-Dimensional Photosphere, the Norwood Director is the only true INCIDENT LIGHT exposure meter. It receives and measures all the light as it will fall upon the subject, resulting in exposures of a quality and accuracy not heretofore attained. One reading... one exposure... one perfect result... in color or black-and-white. Priced at only \$32.95 with Photosphere, Photogrid and Photodisk. Write for Literature. "The Standard of the STUDIOS"

DIRECTOR PRODUCTS CORP.
570 FIFTH AVENUE
NEW YORK 19, N. Y.

NEW PRODUCTS

(Continued from page 33)

red settings, 16-blade diaphragm control with stops to f/32, and depth of field scale. Price \$59.95. For more information write:

A & S CAMERA SUPPLY CO.
1123 BROADWAY, NEW YORK, N. Y.

New Victor Lights

Two new Victor clamp lights C11 Main-lighter (illustrated), and C5 High-lighter, plus a portrait lighting kit, are now available. The clamp lights feature a highly polished exterior and chemical frost interior, red directional handle and spring clamp.

The K1 lighting kit consists of two

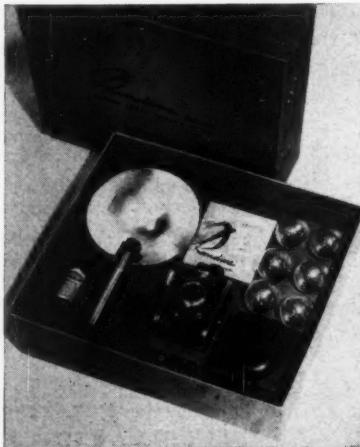


11-inch main lights and a five-inch concentrating or background light—all with detachable-type clamps, in carrying case complete with lamps and lighting instructions. Price of kit, \$14.95; C11 Main-lighter, \$3.95; C5 High-lighter, \$2.95. For additional information write:

JAMES H. SMITH & SONS CORP.
LAKE AND COLFAX STS., GRIFFITH, IND.

Ferrania-Rondine Flash Outfit

The Ferrania Rondine box camera is now available as part of a complete



synchro-flash kit, including flash unit and bracket, six flash bulbs and a roll of film. The Rondine takes 127 film, has

COLOR

is not costly



Thousands of budget-wise photo fans have discovered that they can enjoy full color beauty in every photograph when they use true-as-life Marshall Photo-Oil Colors. Shoot every shot in economical black and white film. Marshall's does the rest at a tiny fraction of the cost of any other color process.

COLOR

can be perfect



You don't have to be an expert photographer... you don't need perfect weather... you don't have to worry about the fastest action to make wonderful colored shots. When you use Marshall's Photo-Oil Colors, you recapture nature's colors just as you saw them with your own eyes.

COLOR

is so easy



It's so simple to use Marshall's Photo-Oil Colors. There's no expensive guesswork. Just follow the simple instructions in every set. No skill is needed, no messy brushes. You'll get perfect color results the first time — and every time.

There's a Marshall Photo-Oil Color for every need... for military uniforms, ask for Marshall's Air Force Blue, Khaki and Navy Blue. FREE! Ask for Marshall Rainbow Color Chart at your dealer!

Send 15c for the 32-page illustrated book "How to Make Beautiful Color Prints."



the most popular color process of all!

MARSHALL'S
PHOTO-OIL COLORS

John C. Marshall Mfg. Co., Inc. Dept. C-1, 147 N. 9th St., Des Moines 11, N. Y.

settings for Instant and Time, and is available in black, green, blue, red, and brown, with matching case. Price of outfit \$25.95. For additional information write:

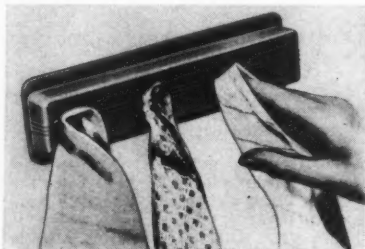
G. A. BUTTAFARRI
207 FOURTH AVE., NEW YORK 3, N. Y.

Edwal Hi-Speed Liquid Fix

Edwal Hi-Speed Liquid Fix which replaces the Hi-Speed Liquid Fix with hardener, is available in 8 and 16 oz. bottles to make three pints and three quarts of working solutions, respectively. The manufacturer claims it will fix most papers in one minute. Price of 8 oz. bottle, 55 cents; 16 oz. bottle, 79 cents. For more information write: EDWAL SCIENTIFIC PRODUCTS CORP. RINGWOOD, ILL.

Drapp Towel Bar

Drapp Towel Bar has four slotted receptacles made to hold darkroom towels or other cloths, placed there by finger pressure. Made of plastic, it is fastened to wood, tile, metal, glass or plaster, by the adhesive material sup-



plied, and is available in a variety of colors. Price for bar illustrated, 39 cents; price of individual holders for one cloth each, 19 cents. For additional information, write:

A. J. GANZ COMPANY
7457 MELROSE AVE., HOLLYWOOD 46, CAL.

Two price lists containing new items and accessories have been released by Carl Zeiss, Inc. Price list 40 includes all Zeiss Ikon cameras and accessories, excepting Contax. Price list 41 covers all Zeiss Ikon Contax IIa and IIIa cameras, lenses and accessories. Included for the first time are the new Contax close-up and reproduction accessories. Both lists may be obtained by writing: Carl Zeiss, Inc., 485 Fifth Avenue, New York 17, N. Y.

Kodachrome film, Type A, in a stereo loading which will produce 20 stereo pairs of pictures, is now available. The new film, designed for use in cameras making 23 x 24mm stereo pairs with standard spacing between pictures, will be mounted for hand viewing, free of charge. For the present, stereo mounting will be available only at Kodak Processing Laboratory, Rochester, N. Y. Price of film, per roll, including processing and mounting, \$4.75. For additional information write: Eastman Kodak Co., Rochester 4, N. Y.

SEASONS GREETINGS

from MITCHELL with
MONEY SAVING VALUES FOR YOU

	Sensational 35mm Value DIAX II E XENON f2 COATED LENS compur rapid M-X shutter single window range finder-viewfinder with leather eveready case list \$145.00 ONLY \$111.50		UNIVERSAL FINDER for all LEICA cameras adjustable from 35mm to 135mm lenses with Parallax adjustment COMPLETE With Case \$29.50
	CHRISTMAS SPECIAL HASSELBLAD 2 1/4 x 2 1/4 single lens reflex Ektar f2.8 — interchangeable film magazines. When New \$548.00 \$349.50 used		New German Import 35mm EDINEX F4.5 coated lens Synchro Prontor Shutter complete with leather eveready case \$29.95
	USED "Like New" BOLEX 16mm DeLuxe with Kern Pizar 1" f1.5 and Octameter List \$423.00 ONLY \$295.00		USED "Like New" Bell & Howell 16mm 70DL with T.H.C. 1" f1.5; T.H.C. 15mm f2.5; 4" T.H.C. f4.5 and combination case. List \$612.00 SPECIAL \$389.00 complete
	SENSATIONAL VALUE GOLDE REFLEX PROJECTOR for 2 1/4 x 2 1/4 films. 300 watts—blower—with case complete with adapters for 2 x 2 film. list \$86.50 SPECIAL \$65.95 Brand New		THRIFTLITE ELECTRONIC FLASH Model AC-40 for most cameras with internal synchronization List \$49.50 ONLY \$35.95

Linhof
4x5 Super Technika
NEW YEAR SPECIAL
LINHOF 4x5 SUPER TECHNIKA, SUPER PRESS and STUDIO CAMERA
Complete with 3 lenses. 150mm f4.5 Xenar, 90mm Angulon f6.8 & 240mm Tele-Xenar f5.5; all cam coupled to multifocus range finder.
LIST \$571.00 USED \$369.00

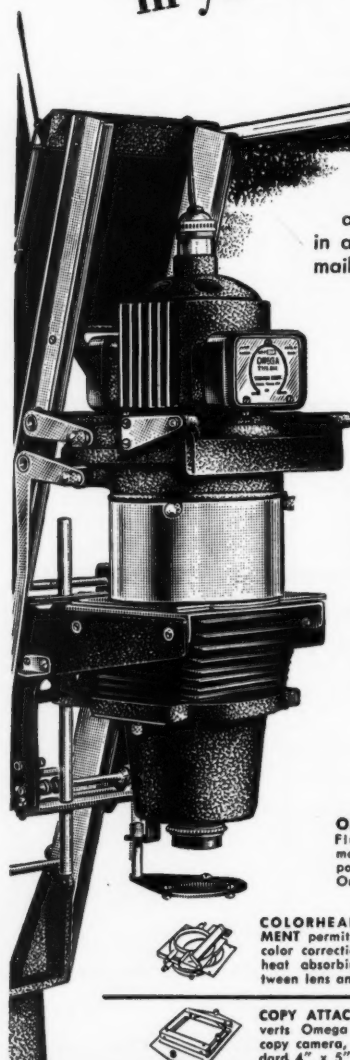
KILFITT telephoto lenses for Kine Exakta Finest Optical Quality at NEW LOW PRICES 90mm f3.5...only \$75.00 135mm f3.8...only 90.00 150mm f3.5...only 97.50 complete with lens hood and filter holder	Genuine Pigskin Gadget Bag 12" x 10" x 5 1/2" Zipper Fastening with lock— Outside Pocket adjustable shoulder strap a \$29.50 value ONLY \$14.95	New GOLDE New 35mm 2 x 2 Manumatic Projector 300 watts blower cooled complete with carrying case list \$70.50 Special \$54.50
--	--	---

NEW NEW NEW NEW
SENSATIONAL 8mm BELL & HOWELL
Model 221 PROJECTOR
500 Watt Lamp—f1.6 coated lens—400' capacity—complete with carrying case & Guaranteed for LIFE.....**ONLY \$99.95**

All equipment sold with money-back trial and one year warranty.

mitchell CAMERA STORES, INC.
127 West 50th St. (At Radio City)
New York 19, N. Y.

How you can get
that "MASTER TOUCH"
in your enlargements



Free

the informative booklet already being used by hundreds of darkroom enthusiasts as a valuable guide for assuring "salon" quality in all their enlargements . . . your copy will be mailed FREE upon request.

omega D-2 the MASTER enlarger

Preferred by expert professionals and critical amateurs alike, because its precision operation assures top results! Created by skilled craftsmen, Omega D-2 has a true condenser system for every size negative from 35mm. to 4" x 5", matches auxiliary condenser focal length to the focal length (2" to 6 1/2") of the lens being used. Sturdily built with a counterbalanced head, the Omega has an inclined girder, smooth action rigid channel guides; uniformly brilliant, cool illumination and easy maneuverability.

omega D-2
\$168⁵⁰
STANDARD

With Colorhead
\$183.50

With Omegalite
\$159.40

OMEGALITE (separate) \$42.75
Fluorescent light source. Recommended for finest diffusion enlarging, portraits, etc. interchangeable with Omega D-2 standard condenser head.



COLORHEAD ATTACHMENT permits insertion of color correction filters and heat absorbing glass between lens and condensers.



SOFT-FOCUS ATTACHMENT Diffuses undesirable detail out of portraits for "salon" effect.



COPY ATTACHMENT Converts Omega D-2 into a copy camera, accepts standard 4" x 5" holders.



RAPID-SHIFT FILMHOLDER for rapid-fire enlarging of 35 mm. film with the Omega D-2 enlarger.

MAIL COUPON TODAY

Your FREE copy of "The 3 Basic Points of Print Quality" will show you how to get outstanding enlargements with that "Master Touch!"

SIMMON BROS., INC. Dept. M.P.1-53
30-28 Starr Ave., Long Island City 1, N. Y.
Please send my FREE COPY of "The 3 Basic Points of Print Quality."

Name _____

Address _____

City _____ Zone _____ State _____

ANY PICTURE IS JUST A SNAPSHOT UNTIL IT'S ENLARGED!

salon calendar

*57TH ANNUAL INT. BIRMINGHAM (ENGLAND) PHOTOGRAPHIC EXHIBITION.

Closes January 17. Exhibit, February 14-28. Fees, \$1 for 4 prints or slides. Classes: Scientific, Technical, Record, Pictorial. Write E. H. Cochrane, 142 Swanshurst Lane, Moseley, Birmingham 14, England.

17TH ROCHESTER INT. SALON OF PHOTOGRAPHY, MEMORIAL ART GALLERY, ROCHESTER, N. Y.

Closing date, February 12. Exhibit, March 6-29. Prints and slides accepted in pictorial, nature and documentary sections. Write John I. Fish, Sales Service Division, Eastman Kodak Co., 343 State St., Rochester 4.

17TH PHILADELPHIA INT. EXHIBITION OF PHOTOGRAPHY, FREE LIBRARY, LOGAN SQUARE, PHILADELPHIA, PA.

Closes February 14. Exhibit, March 7-29. Fee, \$1 for 4 prints or slides. Write Grace E. McBryer, 5814 Cedarhurst St., Philadelphia 43, Pa.

*11TH SEATTLE (WASHINGTON) INT. EXHIBITION OF PHOTOGRAPHY.

Closes March 9. Exhibit, April 8-May 3. Fee, \$1 for 4 prints. Write Arthur Henning, Sec'y, 4516 East 60th St., Seattle 5.

*6TH ANNUAL INT. EXHIBITION OF MARINE PHOTOGRAPHY, JAMES RIVER CAMERA CLUB AND MARINERS MUSEUM, NEWPORT NEWS, VA.

Closes March 17. Exhibit, March 22 to April 17. Fee, \$1 for 4 prints or slides. Write R. A. Myers, 1609 E. Warwick Rd., Warwick, Va.

4TH NEW YORK INT. COLOR SLIDE EXHIBITION.

Closes March 20. Exhibit, April 10 and 13. Fee, \$1 for 4. Write Dr. James Jay, 340 West 57 St., New York 19, N. Y.

10TH SYRACUSE (N. Y.) SALON OF PHOTOGRAPHY MUSEUM OF FINE ARTS

Closes April 20. Exhibit, May 6. Fee, \$1 plus postage for pictorial and nature prints and slides. Write Allen Ruch, 1421 Butter-nut St., Syracuse, N. Y.

1ST EVANSVILLE, INDIANA, INT. COLOR SLIDE EXHIBITION.

Closes May 2. Exhibit, May 17-24. Fee, \$1 for 4. Write Presley H. Hill, YMCA, Evansville, Ind.



"Has anyone seen my 35mm film?"

make it merrier... extra exciting... with GREAT UNITED VALUES!

"A THOUGHTFUL XMAS GIFT"

Give Color Slides of U.S. and
World Famous Scenes
Beautiful Color Slides, Perfect Quality

**SET OF 2x2
10 SLIDES for only \$1.00**

With every order of 10 sets or more we will
include at NO CHARGE A 2x2 Slide Film
Box. Value \$1.95.

UNITED STATES

1. National Shrine, Washington, D. C.
2. Along New York's Hudson River
3. Rodeo in California
4. Block Island—Artist Paradise
5. Around New York City
6. Staten Island to Brooklyn Bridge
7. From the Empire State Building
8. Washington, D. C. Landmarks
9. Times Square to Central Park
10. Salt Lake City, Utah
11. F. D. Roosevelt Shrine, Hyde Park
12. Magnificent Niagara Falls
13. Bryce Canyon National Park
14. Yellowstone National Park
15. Yellowstone—Heart of the Nation
16. Santa Barbara, California
17. Mission San Juan Capistrano
18. Blue Bend National Park
19. Washington, D. C.
20. Hialeah Racecourse, Florida
21. Miami International District
22. Miami Waterfront
23. Miami Environs
24. St. Augustine, Florida
25. Hollywood to "Frisco"
26. California—Wonderland
27. New York City—Radio City
28. New York City—Midtown Westside
29. New York City—Downtown
30. New York City—Financial District
31. Great Smoky Mountains
32. Chicago
33. Notre Dame University
34. Touring the Grand Canyon
35. Grand Canyon Scenic Beauty
36. Colorado & Estes National Park
37. Kansas City, Mo.
38. Glacier National Park
39. Yosemite National Park
40. Wisconsin Dells
41. Grandeur of the Tetons
42. Mackinac Island, Michigan
43. Petrified Forest
44. Mt. Desert Is. & Acadia Nat. Park
45. Hoover Dam

FRANCE

50. Paris and Notre Dame Cathedral
51. Landmarks in Paris
52. Paris and Points of Interest
53. Louvre and River Seine

SPAIN

60. Scenes in Madrid
61. Madrid has Beauty and Life

IRELAND

70. Sun-up to Sun-set in Cork
71. Visiting Blarney Castle
72. Ennis, Cork and Shannon Airport
73. Past and Present in Limerick

ITALY

80. Rome and Landmarks
81. Rome, Ruins, Mt. Vesuvius
82. Rome and the Present
83. Along Rome Streets
84. Rome has Beauty and Life
85. Vatican City and Religious Rome
86. Rome—the Old and New
87. Inside Vatican City
88. Genoa—and Columbus
89. Venice, City of Canals

EGYPT

100. Pyramids to Cairo
101. Cairo—Ancient and Modern
102. Landmarks on the Nile
103. Everyday Life in Egypt

INDIA

110. Street Scenes in Bombay
111. Life in a Restaurant in Bombay

PORTUGAL

121. Beauty and Color in Lisbon

SCENIC TOURS

130. Alaska—American Outpost
131. Honolulu, Waikiki—Hawaii
132. Highways, Palms—Guam

SWITZERLAND

140. Mountainous Swiss Majesty
141. Swiss Panorama

TURKEY

150. Modern Istanbul
151. Istanbul Landmarks

GREECE

160. Athens and the Past
161. Everyday Life in Athens

JAPAN

170. Japan is Progressive

MEXICO-CARIBBEAN

180. Mexico—Tourist Paradise
181. Touring Mexico
182. Bermuda—Vacation Playground
183. Cuba—Sightseeing Havana

ENGLAND-CANADA

200. Classic England
201. Canada
202. Newfoundland
203. Australia

ISRAEL

211. Haifa & Tel Aviv

CHILDREN STORIES

- C-1. Day at the Circus
- C-2. Under the big top
- C-3. Story of Pinocchio
- C-4. Peter Rabbit
- C-5. Tarzan
- C-6. Fun at the Fair

SHOWS—SHOW GIRLS

- P-2. Pin Up Girls
- P-3. Backstage
- P-4. Ice Capades

ANIMAL KINGDOM

- A-2. Brookfield Zoo
- A-3. Brookfield Zoo

RELIGIOUS SERIES

- R-3. Passion Play

FLOWERS

- F-1. Tournament of Roses Calif.
- F-2. Tournament of Roses Calif.

UNITED'S SPECIAL XMAS GIFT TO YOU

FREE! WITH ALL ORDERS OVER \$3.00 FREE!

Choice of

- Gift A. 2X Kodachrome Print Wallet
Gift B. 3X Kodachrome Print Wallet
above 75¢ value each.
Gift C. Photrix Meter Case, Leather Zipper Type
Can be used to store small accessories
such as filters Value \$1.50.

LENSES, FINDERS AND ACCESSORIES FOR LEICA

*Starred Items are brand new Others Used.	
8.5cm f1.5 Summaron Coated Telephoto	\$274.50
3.5cm f3.5 Elmar Coated wide angle	56.50
2.5cm f3.5 Summaron Coated wide angle	72.50
*3.5cm f2.8 Schneider Xenogon Ctd w.s.	76.50
*3.5cm f4.5 Steinheil Coated wide angle	56.50
5cm f1.5 Summarit Coated lens	175.50
*35mm f3.5 Canon Serenar Coated with finder and case	139.50
85mm f2.8 Nikkor Coated Telephoto	119.50
90mm f2.5 Angenieux Type VI	49.50
*90mm f4.5 Solca Coated Telephoto	45.95
90mm f4 Elmar Coated Telephoto	58.50
*135mm f4.5 Steinheil Coated Telephoto	59.00
*85mm f2.8 Steinheil Coated Telephoto	67.50
*135mm f3.8 Tele. Snovova Coated Telephoto	53.50
135mm f4 Canon Serenar Coated Telephoto	79.50
135mm f4.5 Hecker Coated Telephoto	119.50
10" f4.5 B&H Eymax Coated Leica Mt. Tele.	97.50
*Leitz Biotar 50mm Complete	18.00
Mirror Reflex Housing Leitz	95.00
Leica Motor for Model G Cameras	65.00
Leitz Adjustable Collapsible Shades	10.95
*Leitz Ball Jointed Large Tripod Head	13.50
*Leitz Leica Self Timmer	6.50
Leitz Leica Cassettes	2.49
Leica Polarizing Filter	21.50
*Leitz Kontakt for all Models Please specify	9.95
*Imported Set of 7, 15, 30, mm Extension Tubes	7.49
*Imported View Finders with case for 3.5, 5, 7.5, 9, 8.5,	
and 13.5 cm Lenses	7.19
Leitz Vidom Finders Chrome	21.50
Leitz Bullet View Finders	14.95
*Imported Infrared Style Finder with case for all lenses	27.95
*Value \$42.00	
Leitz Filters Green I, Green II, Red, Orange, for 50mm	
Elmar, Summar, Summaron, 90mm Elmar lenses	3.95

DARKROOM GIFT SUGGESTIONS AT GREATLY REDUCED PRICES

Federal 269 Enlargers 2 1/4 x 3 1/4" w/ lens	\$30.95
Federal 135 Enlargers 35mm w/ f4.5	37.95
Sun Ray Aristocrat 2 1/4 x 3 1/4" Enlarger, lens	9.95
2 x Plastic Funnel	1.95
Darkroom Foot Switch	2.98
Electric Photo Enlarging Meter	2.39
60 Second Audible Darkroom Timers	2.49
Rubberized Darkroom Apron	98
11x14 Special Enamel Hypo Bath Trays	1.95
Kodak Day Load Tanks for 35mm	7.39
120 Nikor Stainless Steel Tanks	6.15
35mm Single Reel Nikor Tanks	5.99
Superb 5x7 Adjustable Metal Contact Printer	12.50
Brumberger 8x10 Paper Safes	8.35
Brumberger 11x14 Paper Safes	15.15
11x14 Sun Ray Adjustable Metal Easel	5.30

LATEST PHOTO PUBLICATIONS IDEAL GIFTS AT SPECIAL PRICES

CAMERA GUIDES

Bolsley Guide—Stereo Realist Guide	
Modern Exakta Guide—Gu.de to Kodak	
Miniature Cameras—Modern Rollei	
Argus 35mm Guide All by Tydings . . . each	\$1.55
Leica—Rolleiflex—Contax—Exakta	
Imported Guides . . . each	1.55
Korntal Camera Guides	1.25
Karat, Robot, Retina, Ikonta Imported Guides . . . each	1.09

KODAK PUBLICATIONS

This is Photography	\$2.29
The Book of Enlarging, Bigger & Better	2.49
Kodak Professional Handbook	3.29
Density Kodaguide	.85
Kodak Print Exposure Computer	2.59
Kodak Reference Handbook	3.29
Kodak Cine Photoguide	1.49
How to Make Good Pictures	.85
How to Make Good Movies	1.89
Kodak Photographic Notebook	1.09
Kodak Color Handbook	3.29
Lenses in Photography	2.59
Photography in Law Enforcement	2.29
Kodak Master Photo Guide	1.49

SPECIAL PURCHASE 8MM WIDE ANGLE LENS ATTACHMENTS

- Fit Over Most Lenses
- 2 X Magnification
- Value \$15.50

ONLY \$9.95

MAIL ORDERS FILLED PROMPTLY

All prices listed are F.O.B.
New York City. C.O.D. orders
require a deposit of 10%. Please include shipping
charges with all orders.
Overpayments will be cheerfully credited.



Save \$278.00 CONTAX-S CAMERAS

• f2 "T" Ctd Biotar lens.

- w/ Pre-Set Automatic Diaphragm.
- w/ Carrying Case.
- w/ Instruction Booklet

**Only
\$199.50**

Accessories for Contax S & Praktika Cameras ALL BRAND NEW AT SPECIAL SAVINGS

• Imported Bellows	\$23.95
• 13.5cm, f3.8 Sun Telephoto Coated	47.95
• 7.5cm, f1.5 Biotar "T" Ctd Telephoto	159.50
• 90mm f4.5 Sun Telephoto Ctd.	41.95
• 135mm f4.5 Steinheil Ctd Telephoto	47.95
• 85mm f2.8 Steinheil Ctd Telephoto	53.95
• 40mm f4.5 Heliopan Wide angle	62.50
• Set of 7, 15, 30mm Extension Tubes	7.49

ONLY SIX OUTFITS

35mm STEREO REALIST OUTFIT

- Used Stereo Realist Camera f3.5 lens.
- Case for above.
- Flash Gun.
- Do Luxe Viewer

**Only
\$133.95**

"MOVIE GIFT HIGHLIGHTS"

ELITAR IMPORTED MOVIE LENSES

- For ALL 8mm Camera Owners
- Standard D Mount

ALL CHROME FINISH—Coated GUARANTEED FIRST QUALITY

1" f3.5 Fixed Focus Telephoto	\$ 7.79
1 1/2" f3.2 Fixed Focus Telephoto	10.95
1 1/2" f3.2 Focusing Mount Telephoto	13.95
1 1/2" f2.3 Focusing Mount Telephoto	21.95
1 1/2" f1.9 Focusing Mount Telephoto	29.95
1 1/2" f1.5 Focusing Mount Telephoto	32.95
6mm f1.9 Fixed Focus Wide Angle	30.95

"MINOX" The Ideal Gift

	New	Used
Minox III Camera (Latest 1952 Model)		
w/ f3.5 lens	\$123.00	\$84.50
Minox II Camera		69.50
Minox Exposure Meter	21.45	14.95
Minox Developing Tanks	9.90	7.95
Minox Heliplate Projector	30.85	24.50
Minox Black & White Films	Per roll	1.91
Minox Color Film	Per roll	1.25



LEICA CAMERAS SALE HOLIDAY REDUCTIONS

Leica A w/ f3.5 Elmar Lens	\$ 39.50
Leica D w/ f3.5 Elmar Coated Lens	89.50
Leica IIIC w/ f2 Summarit Coated Lens	207.50
Leica G w/ f2 Summar Lens	109.50
Leica IC w/ f3.5 Elmar Coated Lens	129.50

"IN TIME FOR XMAS"

BRAND NEW 4x5 PACEMAKER

GRAPHIC OUTFIT	Crown Graphic	Speed Graphic
• 4x5 Pacemaker Graphic	\$126.40	\$170.45

- 135mm f4.7 Schneider Xenar in Compur Rapid MX Synchronized shutter.
- Kalart Coupled Range Finder installed.
- 3 Cell Flash Gun with reflector, cord.
- 120 size Roll Film adapter, 2 masks
- Press Carrying Case

Total Value	\$272.90	\$316.95
United Savings	53.40	74.25
United's Xmas Special	\$219.50	\$242.70

UNITED

CAMERA EXCHANGE

83 CHAMBERS ST., NEW YORK 7, N.Y.

14 WAYS TO PRINT A NEGATIVE

BY ROBERT ROLOFSON, JR.

SOME PHOTOGRAPHERS like to dunk a negative in acetic acid for the fun of seeing what will happen. Others perform the same experiment in hopes that they can learn to control the result in such a way as to add one more tool to their bag of creative techniques. Whichever approach you use, a single negative will provide a basis for unlimited experimentation. The fourteen variations shown here barely scratch the surface of the experimental possibilities I found in a straight portrait negative.

The negative you choose to work with will, of course, be made on whatever type of film you normally use. Rather than risk spoiling it by reticulation or other special processes, however, I suggest you make duplicate negatives on one of the high contrast films used by engravers. Most film manufacturers supply this type of film under trade names such as Reprolith, Kodolith, Cracolith Plate, etc. Your dealer can order it for you. Since the film usually comes in sheets 8 x 10 inches in size, you will want to cut it into smaller sizes for making either contact prints or small enlargements from your original negative.

If you are intrigued by the results of your first experiments, I suggest you refer to two definitive articles which appeared in *MODERN's* predecessor, *Minicam Photography*. In the April, 1949, issue, the use of high contrast film for experimental work was thoroughly discussed; in the February, 1949, issue, control of reticulation by means of acetic acid and temperatures (heat and refrigeration) was explained in detail.—THE END



1. STRAIGHT PRINT from a negative made on Super Panchro-Press Type B film in a Graphic View camera. All the following prints are variations obtained when darkroom magic is performed upon negative.



4. TONE ELIMINATION is performed by contact-printing original negative on Kodalith film. Making repeated negatives and positives drops out gray tones, final positive is reticulated in acetic acid.



2. CONTROLLED DISTORTION, produced by "bending" the upper portion of a sheet of enlarging paper away from the lens during projection. Bending the paper towards lens produces the opposite effect.



3. MELTED EMULSION. A duplicate negative was dipped in hot water to produce reticulation. Then soda was added to water to make emulsion slide. Alum shortstop and refrigeration "stopped" action at desired effect.



5. SOLARIZATION of one of the Kodalith negatives which helped produce Figure 4 yields this totally different result. Repeated solarization of negatives and positives can be carried out indefinitely.



6. STEPPED EFFECT, similar to that produced by the Futurism school of painting, was achieved by raising the enlarger head in each of a successive series of exposures made from the same negative used for Figure 5.



7. EXPLODED print also suggests Futuristic style of painting. Made by racking the enlarger in and out of focus while exposing *Figure 5* negative. This causes radiating light source to envelop subject with an aura.



8. OUT OF FOCUS in the enlarger, the line negative used in *Figure 5* produces this unique effect. The highlights and shadows of the portrait give the illusion of having been broken into vibrating circles.



11. PORCELAIN EFFECT was obtained by making a duplicate of the original negative on Kodalith film, and dunking it in full strength acetic acid. Eyedropper is used if only small area is to receive reticulation.



12. SILK SCREEN EFFECT, quite similar to Chinese scroll paintings, was obtained by simply contact-printing the reticulated negative used in *Figure 11* through a diffusion screen onto Kodalith film.



9. NEGATIVE PRINT. This abstract-like portrait is a variation obtained by making repeated reversals of original negative on Kodalith film, then printing the final result as a negative instead of a positive.



10. WOODCUT EFFECT. This print is the exact reverse of Figure 9. In other words, the Kodalith transparency used for Figure 9 was again contact-printed on Kodalith film to make the transparency used for this print.



13. DOUBLE PRINTING. The image which appears to be outlined in black string is actually the solarized negative from Figure 5, now printed in "sandwich" form together with the negative of a sand dune.



14. PHOTOGRAPH-PHOТОGRAM. A peculiar impression of movement is created in this variation by casting the shadow of a perforated metal screen across the enlarging paper during the projection of negative Number 5.





HEINIGER

PRECISION MEANS FINE

PHOTOGRAPHY TO HIM

by STANLEY H. BROWN

SOMETIME THIS SPRING a man will get off a ship from Europe loaded down with cameras and a strong urge to see wide open spaces and will begin searching for a new home in the U.S. His name is Ernst Albrecht Heiniger and he is tossing over a lucrative photographic business in Switzerland for a chance to take his chances here where few people have ever heard of him.

At 43 Heiniger figures he has had enough of the ups and downs of the mountainous Swiss terrain, and he wants to see country that's spread out flat. But there's another reason for his leaving Switzerland for a while—you could probably call it lingual frustration. Besides being a top Swiss commercial photographer, Heiniger does most of the layout work for the advertisements, books, and catalogs his pictures illustrate. But in Switzerland there are four national languages—German, French, Italian and Romansh—and practically all catalogs and books are printed in all four. Trouble is, though, that each language requires a different amount of type to say the same thing, so once a layout has been made in terms of one language it never quite fits for the other three no matter how hard you try. So after 25 years of trying, Heiniger wants to lay off for a while amid wide open and monolingual spaces.

This two-year interlude will change his scenery, but it probably won't change his photography. For Heiniger that means precision. It's the word he uses most often to describe his technique, and though it is a word used frequently to describe things Swiss—and sometimes not too flatteringly—don't get the idea that there's anything mechanical about what

Heiniger waited a long time for this boat to cut photogenic wake on the Vierwaldstattersee, Switzerland. He used a Rolleiflex, 1/50, f/16, Panatomic-X film.

he turns out. Whether it's for a travel poster, an ad for an oil company, a brochure for the Swiss phone company, or just something that caught his eye on one of his trips through the countryside, it's artistry in film.

Take a single Heiniger photograph as an example of what precision means to him. One day a couple of years ago, he was shooting at Lake Silvaplana near St. Moritz. Lake, trees and shadows were beautiful but the problem was to reproduce this scene, so that anyone seeing a photograph of it would know immediately exactly what it felt like to be there. Heiniger unpacked his favorite camera, a 9x12 cm. (approximately 3 1/4 x 4 1/4 in.) Linhof, set it up on a tripod, and started looking around for the right part of the lake and the proper angle to shoot it from.

After an hour of hauling the camera around, trying various lenses, swinging the front, checking the exposure with his meter, choosing first one filter—then another, waiting for the sun to hit from just the right angle, and examining the ground glass a hundred times to make sure that the composition was

what he wanted, he finally came away with a picture. It was a long view of lake and trees, shadowed deeply at the horizon, with light, middle and dark tones combining at just the right places to make a perfect composition, in such a way that every change in tone in the landscape was in the picture. *Page 49.*

"So, what do I need his picture for? I'll go buy a picture post card," you might say. But the point is that Heiniger succeeded in translating the significant aspect of the lake—its peace and quiet—into a photograph. That's just one kind of problem he deals with photographically, but it's typical of his whole approach to photography. The strange part of it is that Heiniger didn't start out with a precision approach at all. If anything, the work he originally did might have given him the idea that it doesn't matter what kind of shot you make, you can fix it later—he started out as a retoucher.

When he was 16, he left his father's farm and came to the big city, to Zürich, to serve as an apprentice retoucher in a printing concern. He stayed with it about three years and then quit before finish-



Simple portrait of girl in wind was taken at fairly high speed to cut blur of hair. Rolleiflex, f/9 at 1/250 sec. Super-XX film.



Horse was photographed with 9x12 cm. Miroflex, equipped with f/6.3 lens, f/9 at 1/250th.

Christmas charity poster assignment resulted in this fine study of mother and daughter taken with 9x12 cm. Linhof equipped with f/4.5 Tessar, f/12, 1/50th.



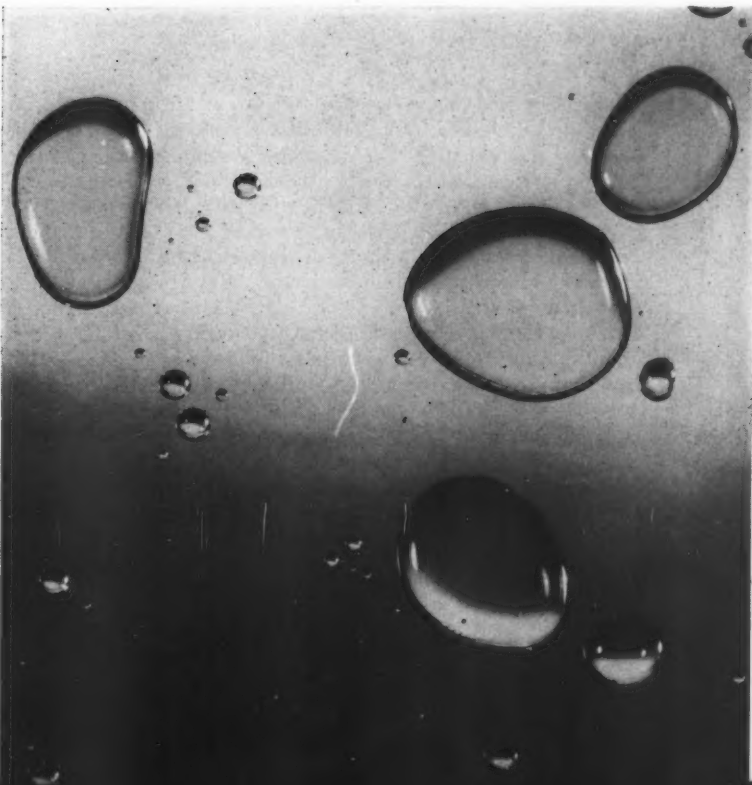


ing his apprenticeship to work on his own as a free-lance retoucher to put himself through a graphic arts school. At about the same time, he bought himself his first camera (he says he doesn't remember what kind it was) and started learning photography on his own. After a while he began to realize that the only enjoyment he was getting out of retouching work was the feeling that "at least I was improving some pretty bad pictures." Finally he decided to put his photographic knowledge to work. He talked some of his retouching customers into letting him retake their pictures and charging them only what the retouching would have cost. At the same time he convinced customers who gave him shots of machines to work on that if they painted their products gray instead of black they would save themselves money since gray photographs better than black and painters cost less than retouchers. That suggestion not only changed the color of a lot of machines in Switzerland—it also got Heiniger out of a business he was growing to dislike into one that he has stayed with enthusiastically ever since.

While Heiniger was becoming a commercial photographer, he was learning about layout, design, and composition at school. When he finished school, he began working as a photographer full time, but he combined his graphic arts background with his camera work so that he could take a projected book, pamphlet, or catalog and carry it through photography, layouts, and typography to the final printing stage. Even then he wasn't content to stay in one field, so he began working with movies. In 1932 he landed a job with the great Russian movie director, Sergei Eisenstein, first as his assistant cameraman and later directing documentaries in Siberian coal mines. He returned to Switzerland in 1933 to add movie-making to the string of services he could offer his clients. But the movie work did more than that for him, he says. It taught him the value of precision planning in advance of shooting. "In movie-making," he says, "there's no chance to crop and retouch after you've shot. Everything has to be thought out carefully and completely before you ever lay a finger on the shutter

Nude on beach was photographed with Rollei, $f/12$, $1/100$.

Drops of water were recorded on a greased chromium sheet. Surface is slightly curved, giving a dramatic effect of light and shade. Taken with 13x18 cm. view camera, Heliar $f/4.5$ lens, $f/48$ at 6 sec. Agfa Isopan Plate.



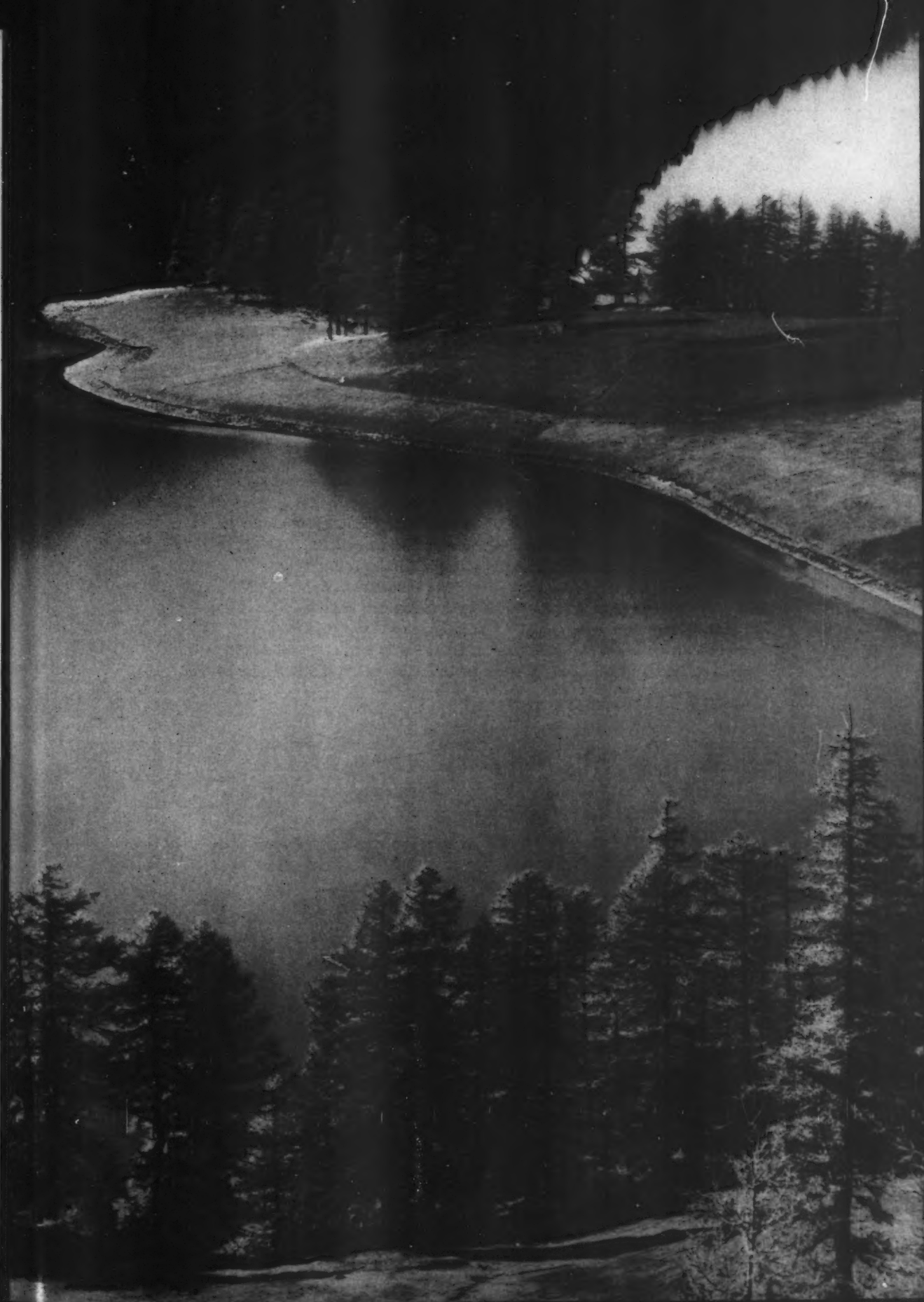


Bicycle riders were photographed in late afternoon in Zürich with Leica. Elmar lens, Exposure: f/11, 1/100th.

Heiniger used a light red filter to produce strong contrast in this landscape taken near St. Moritz. Linhof equipped with f/7.7 Zeiss Double Protar lens, f/36 at 2 sec. on Plus-X.

release. I carried this experience over to my still photography, and now, if I have time, I plan every detail of lighting and composition in advance, so that I rarely have to do any major cropping or retouching after shooting. I've developed a genuine dislike of the whole idea of retouching now and only do it when it is absolutely necessary for reproduction purposes or some other similar reason."

So now you ask, "How can his stuff have any spontaneity if it's so completely blueprinted in advance?" But it does. Take another case study of one of his shots. The assignment was a mountain climber in action. It sounds as if the easiest way would be to take a Leica or a Contax, set the shutter at a high speed, stand on some slope at a point where a lot of climbers pass, and keep shooting till you think you have what you want. Then go back to your lab with your fingers crossed. But not Heiniger. He planned the shot from start to finish before he ever used a piece of film. He figured a good kind of action shot would be a jump across a crevasse. So he found a likely one that his man could jump without getting killed. Then he set up his camera—again the Linhof on a tripod—and began jockeying for the best position to shoot from. He had the man make a couple of practice jumps to make sure he wouldn't be leaping out of the picture. But he still wasn't ready to go. In order to make the kind of composition he wanted, he needed a cloud over the jumper's head. But it was a clear day with only a couple of clouds off on the horizon, so they waited until one moved into the right position. Then the jumper jumped, and the photographer photographed. "If the cloud hadn't come by before the sun went down, I would have probably double-printed one in from some other negative," he said of the incident, but he added, "I don't like to do that kind of trickery unless (*Continued on page 94*)



I like to shoot outdoor winter portraits because most photographers try to go south and work during the few bitter months. I can't say that I blame them—but they do leave the winter field wide open for stay-at-homes like me. Shooting portraits on a crisp winter day just after a snow can be great fun since everything is a reflector. You don't have to lug tinfoil flats to fill shadows or bring along elaborate flash equipment, though I sometimes do use one flash bulb for a fill-in. I've found that shooting portraits in places hidden from direct sunlight is an excellent way to capture fine effects, like that to the *right*, where the girl was in shadow. There are some warnings, however: That beautiful snow kicking all the extra light around is just too much for some models. They cannot pose without squinting, even for a split second. I always check with my model to make sure she isn't an extreme squinter. In some cases, a model can turn in a wide-eyed relaxed expression for just a moment—long enough to trip the shutter; then there's a short wait while the tears are wiped away. Plan so that your model doesn't have to look directly into the light. Check your exposure even more carefully than usual. The intensity of the light can fool even the most experienced photographer. Don't shoot when it's too cold. Unless your shutter has been winterized, it may become sticky. And your model will look as unhappy and as uncomfortable as she feels. If you keep these hints in mind, you'll have a lot of fun. Winter is the time to find rosy cheeks, lively faces and bright sports clothes. And that's just made to order for the camera loaded with color film. The photograph of the girl in a parka, *right*, was taken about 10 A.M. on a bright day. The subject was in shadow. All the brightness necessary was supplied by the fresh fall of snow. Taken with a 4x5 Crown Graphic, f/11 at 1/50th on Daylight Ektachrome. The cover shot, *below left*, was taken with one blue flash for a fill-in. I used a 4x5 Speed Graphic equipped with a 135mm Graflex Optar lens. Exposure: f/8.5 at 1/100th.—Ozzie Sweet

TRY COLOR PORTRAITS OUTDOORS







HOW THEY SHOT THE WORLD'S BIGGEST FLASH PICTURE

HAVING TROUBLE with a few flashbulbs in your own home? What would you do if you were handed several thousand, and told to photograph an area a third of a mile long? How many bulbs would you use? Where would you place them? And just how much power would you need so all the bulbs would flash together when you threw the switch? All of these problems faced technicians before they fired 2,400 No. 2 Sylvania bulbs in the Big Room of Carlsbad Caverns, last August, to set a new world's record for multiple flashbulb photography. You are looking at the result, taken with an 8 x 10 Eastman View Camera at f/22—one of 19 cameras which photographed the same scene by open flash.

And what a flash it was! Over 148 million lumen seconds of light were unleashed beneath the New Mexico desert to surpass by 28 $\frac{2}{3}$ millions the previous record-holder—a color shot of Levittown, N. Y.—and produce thirty times more light than technicians set off when they photographed New York's Metropolitan Opera House.

The first step toward this engineering feat (in which only two bulbs failed) was a letter from Tex Helm, long-time photographer of the caverns, to Sylvania Electric Products, Inc., outlining what he wanted to do. When Sylvania agreed to supply two or three thousand bulbs and technical assistance, planning finally got under way

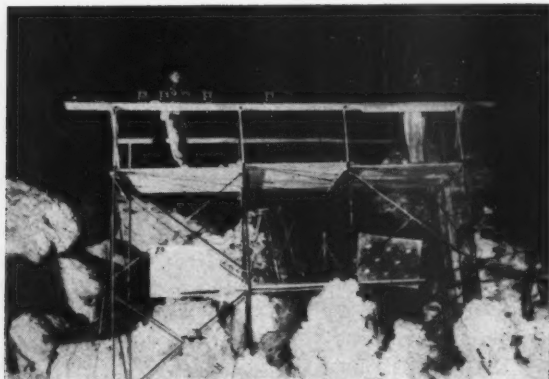
to solve problems which rarely face most photographers.

High on the list of questions was: How many bulbs, for what camera speed and stop? To answer this, R. B. Martenson, the Sylvania engineer who had masterminded the color shot of Levittown and Joe Costa's opera house picture, pulled out pencil and paper and went to work. He knew from previous experience that if a camera was set at f/16 and open flash with Ektachrome, Type B film, two lumen seconds of light would be needed to cover each square foot of surface for a low lighting effect. But the 55 million square feet had no flat surfaces, because the entire area was broken up by small and large rock formations. Certainly the over-all reflection would be lower than the norm called for by his formula—but how much lower? To figure all this out, Martenson made a series of estimates, and added more light to the 2 to 1 ratio. And once he had the final figure of 148.8 million lumen seconds of light, it was a simple matter to divide by 62,000 (the lumen seconds produced by one No. 2 bulb)—and get the answer within one stop.

From now on "Project Flash" swung into long-distance high gear. Helm had a lighting plan (which you can see if you turn to page 112), and ideas for two different kinds of reflectors. Martenson in New York okayed these, and worked out a wiring plan suitable for the reflectors and the available power. Then line foreman A. C. Wright, of Southwestern Public Service Company, went to work on the electrical details.

Offers of equipment, materials and labor rolled in from Carlsbad residents and firms, as well as from Eastman Kodak Co., Graflex, Inc., and others. But still there were problems galore. Imagine having just 16 hours—from 4 P.M. to 8 A.M., when the Caverns were closed to visitors—to take this shot. Sixteen short hours to transport all the material, including three heavy-duty transformers weighing a ton, 750 feet down into the Caverns and then half a mile to the Big Room—set up the shot—photograph the room—and remove all equipment. And as if that wasn't enough—early on the morning of August 18, with starting time only hours away—nobody could locate the flashbulbs. Where were they? Why, in Amarillo, Texas, about 300 miles away. So technicians had the bulbs rushed to the scene by private car—and they arrived just in time.

At 4 P.M., with the bulbs now on hand, volunteer crews went to work to beat the (Continued on page 112)



Each of the 19 cameras on this 15-foot high platform photographed the same view of the Big Room in Carlsbad Caverns, N. M., which you see at left. The distance between them and the furthest point in the picture is 1800 ft.



KODAK
PHOTOGRAPHIC
PAPER

OPEN ONLY IN LIGHT CONDITIONS SPECIFIED FOR THIS PRODUCT

ENLARGING FROM A TO Z

by F. F. PYPE

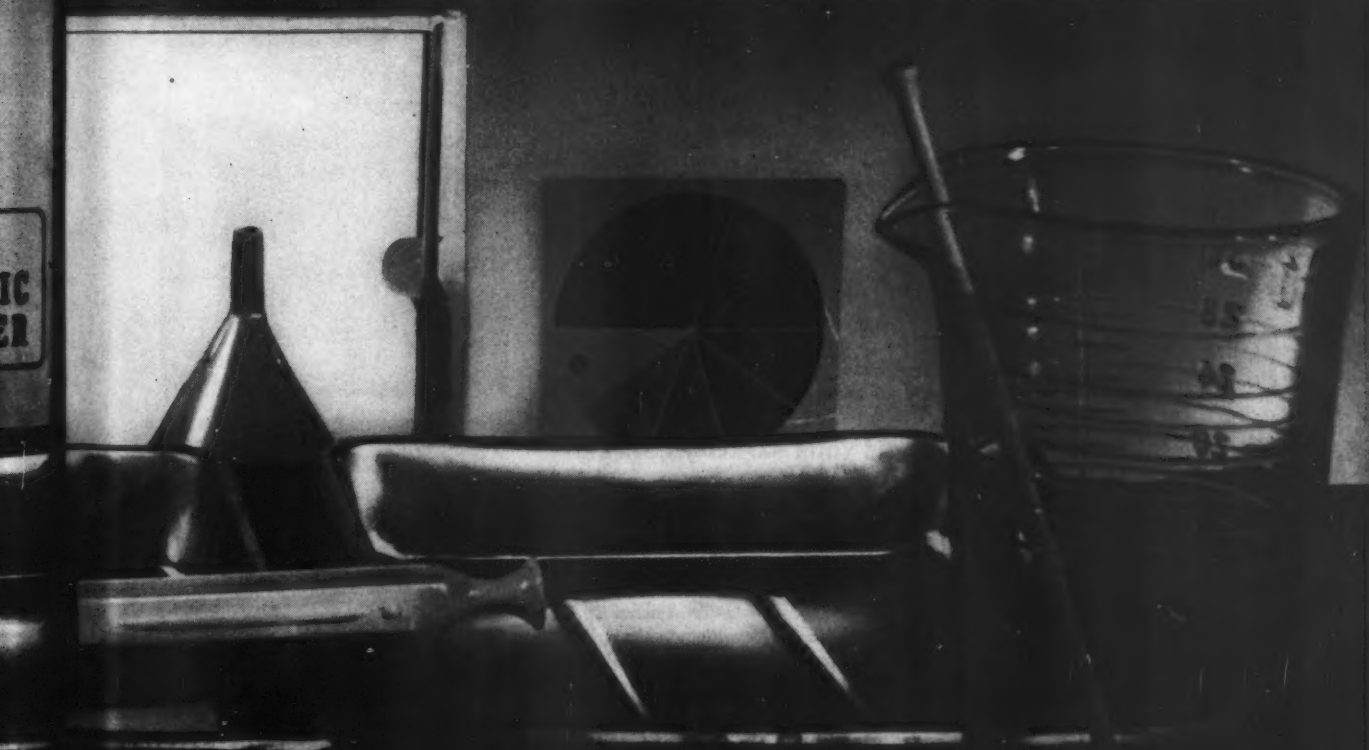
FIRST OF A SERIES

HAVE YOU EVER looked at a fine print of your own making and had the wonderfully satisfying thrill of knowing that you did it all yourself? If not, if you've never made an enlargement, you're missing the greatest fun of photography. Yet, enlarging is easy, if you get the right start at it. This article, with the rest of the series, will cover every aspect of fine print making.

The enlarger is the only major investment. It pays to get a good (not necessarily expensive) one, and in a future article enlargers will be discussed at length. You also need: three trays, 8 x 10 in., two alike, the third different for identification, and one 11 x 14 tray (stainless steel, enamel, hard rubber are all practical); a sturdy easel (fixed size, inexpensive Speed-Ez-Els are shown but there are many adjustable easels); a safelight with Wratten OA (yellow-green) filter and 10-watt bulb; plastic funnel; quart glass graduate and stirring rod; 12 plastic clothespins; a tray thermometer; Kodak Projection Print Scale; two pair of print tongs of different colors; package of any standard make 8 x 10 enlarging paper (contrast grade No. 2, normal, or equivalent); quart of paper developer stock solution; pint of 28 percent acetic acid; quart of hypo stock solution (not the quick fix type). These are basic items for beginner or expert; none is expensive. Except for paper and chemicals they will serve many years. Now turn the page, see how easily these materials will make your first or thousandth print.

PHOTO

IC
ER

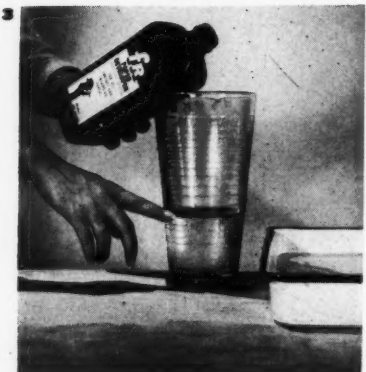


ENLARGING FROM A TO Z: PART I



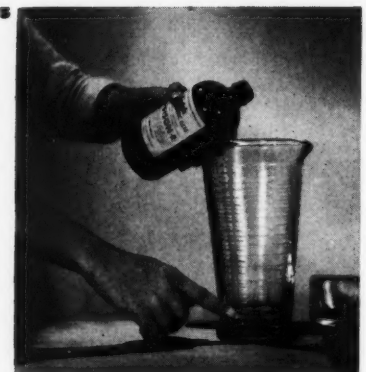
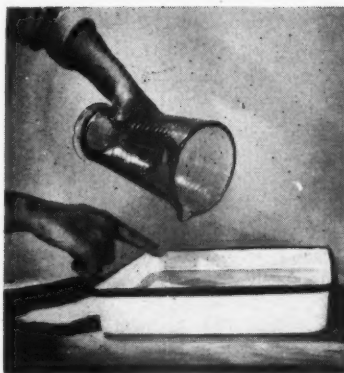
LAY OUT THE EQUIPMENT

◁ The enlarger can be set up anywhere on a table, bench, or other solid support. This is a DeJur enlarger; there are a number of worthy brands. To avoid splashing chemicals onto ▷ the enlarger or paper, the trays are set up in another part of the room. Safelight should be about 3½ ft. from the trays, turned toward them. Print tongs of two different colors rest on edge of trays. Use one color only for developer; use the other color tong only in the two other trays. Wear a plastic or rubberized apron.

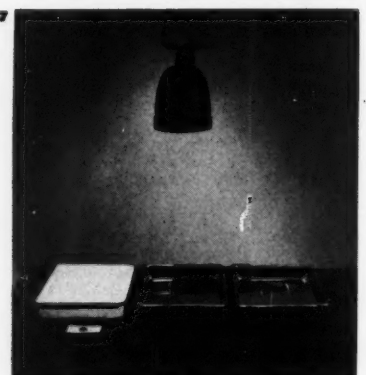


MIX ENOUGH CHEMICALS

◁ Liquid chemicals are simplest to prepare, need only dilution. Several firms make them. These directions are for FR developer. For other brands follow mixing instructions on label. Pour 8 oz. of developer stock solution into the graduate, add cold water (about 68°F.) to make 32 oz. This is the *developer* working solution. Pour the developer into the de- ▷ veloper tray and always use the same tray, which should be of different material than others to identify it.

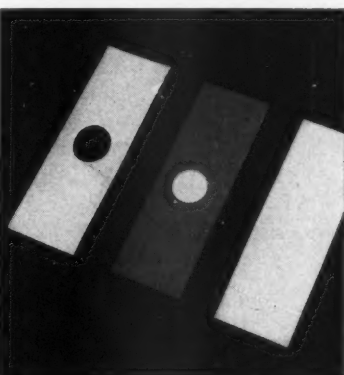


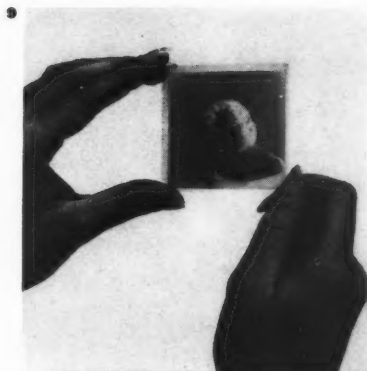
◁ Rinse out the graduate thoroughly and pour in 2 oz. of 28% acetic acid. Fill the graduate with cold water to make 32 oz. of *shortstop* solution. Pour this into the tray next to the developer tray. Rinse the graduate. Shortstop arrests development of the print, neutralizes developer which is carried over in the print paper. Pour 8 oz. of fixer stock solution ▷ into the graduate, add cold water to make 32 oz. and pour it into the remaining tray. This is the *fixer*, which is commonly called *hypo*. It fixes the image on the print, makes it permanent, insensitive to light.



IS YOUR SAFELIGHT SAFE?

◁ Is your darkroom dark enough, your safelight safe? Close the door, turn on the safelight. Put a coin on a small strip of enlarging paper, *near right*, on the table near the developer tray, leave it for 3 min. Then drop the paper in the developer, agitate it for 2 min., rinse for 15 sec. in shortstop, put it in the hypo, turn on room light. Paper should be clear white, *far right*. If coin shape shows, *center right*, light is leaking in, safelight is unsafe or too close.

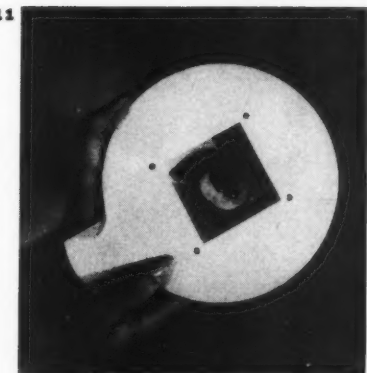




PICK A GOOD NEGATIVE

◁ Pick out the negative to be enlarged. *Handle it only by the edges*; don't put your fingers on the negative. Negative should be sharp, full of detail, moderately contrasty.

Place the negative in the negative ▷ carrier of the enlarger, shiny side up, facing the enlarger light source. The dull (emulsion) side of the negative faces the enlarger lens. Negative carriers are of various designs and shapes. They all have the same purpose, to hold the negative flat and in the correct position in the enlarger.



◁ The image of the negative projected on the easel will be reversed in relation to the position of the negative in the enlarger. So, to get a right-side-up projected image place the negative in the carrier with the image upside down. Don't flip it, rotate it 180° laterally.

Place the loaded negative carrier ▷ in the enlarger, remembering steps 10 & 11 and checking negative.



GET IT SHARPLY FOCUSED

◁ Turn on the enlarger and make the projected image sharp by turning the focusing knob of the enlarger. Pick out a sharply defined, contrasty area in the negative and use it to judge the sharpness of your focusing.

While focusing mechanisms may ▷ vary with enlargers of different makes, the principle is the same: they are focused by raising or lowering the enlarger's lens, adjusting the distance between the lens and negative.



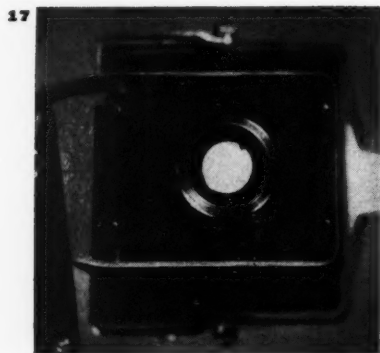
◁ This is the typical blurred negative image projected on the easel when the enlarger is out of focus. When the lens is correctly focused the image should sharpen. ▷

For people who have trouble getting sharp focus, some enlargers have built-in focusing targets; there are also enlargers with automatic focusing devices, but these are considerably more expensive than manually focused enlargers.

(Continued on next page)

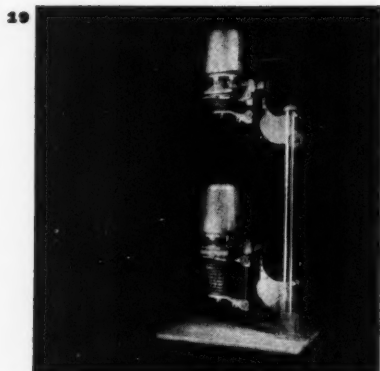


ENLARGING FROM A TO Z: PART I



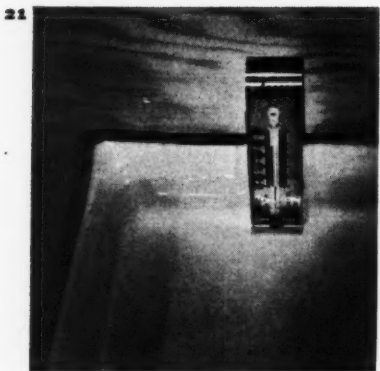
◁ Enlarger lenses have adjustable diaphragms like those in cameras. Focusing is done with the lens wide open. When the negative is accurately focused on the easel and the projected image is sharp, close down the lens two stops. This assures best performance of the lens.

To change the size of the projected image, the enlarger is moved up or down on its post. Although some enlargers have spring counterweights, most do not. Before loosening lock knob grasp enlarger firmly.



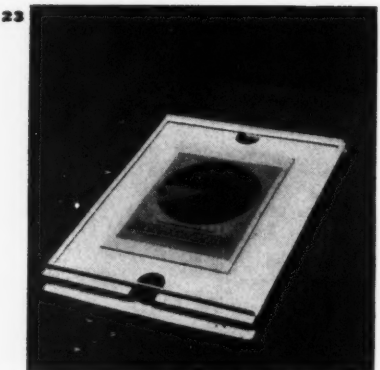
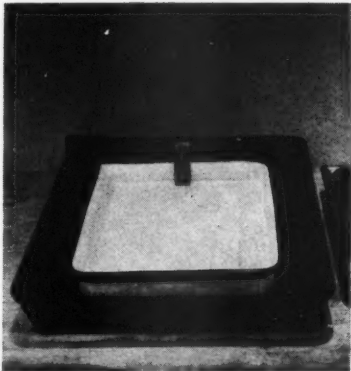
BIG OR LITTLE PRINT?

◁ With the enlarger as far down as it will go, the projected image will be small; the higher the enlarger goes the bigger the image. Sometimes, to make giant prints, enlargers are turned or tilted to project the image on the floor or nearby wall. This gives some idea of the comparative sizes of the images projected when the enlarger is in the two positions shown in the picture at left.



CONTROL THE TEMPERATURE

◁ Check the temperature of the developer. There are little thermometers designed to clip over the tray edge. Although the recommended working temperature is 68°F. developer can be used safely between 65°F. and 75°F. Should it be too hot or cold, temperature can be controlled by putting the developer tray into an 11 x 14 tray of water, adding hot water or ice cubes to the contents of the bigger tray, not to the developer itself.



FIRST MAKE A TESTSTRIP

◁ Although there are other methods, scientific and hit or miss, for determining print exposure time, none is simpler than to use the Kodak Projection Print Scale. Place a piece of enlarging paper, 5 x 7 or bigger, on the easel, put the Print Scale on top of it shiny side up. Hold down the corners by hand or use a sheet of clean glass. Turn on the enlarger and *for one full minute* project the most important part of the subject over the graduated wheel of the Scale.





When the one minute exposure is complete take the piece of enlarging paper (called a teststrip) from under the Print Scale and submerge it in developer (24). Agitate with developer tongs for exactly 2 minutes. \triangleleft After two minutes in the developer transfer the teststrip into the shortstop tray, being careful not to get any shortstop on the developer tongs. With the second pair of tongs submerge the teststrip in the shortstop and agitate it for about 15 seconds. Transfer the teststrip into the hypo \triangleright and swish it around a bit. Check to make sure that no enlarging paper has been left out in the open. After 30 seconds in the hypo for the teststrip, turn on the white room light and carefully inspect the teststrip.

JUDGE THE TESTSTRIP

\triangleleft Notice that each segment of the Print Scale and the teststrip has a number on it. One of these numbers indicates the correct exposure in seconds for the print. Pick out the segment which appears to be best exposed. If one segment appears too light and the next one too dark, choose an exposure between these two. If all segments are too dark, close down the enlarger lens one more stop, try again. If all segments are too light, try a *two minute teststrip exposure* and for your final print double the exposure indicated on the teststrip segment.

THEN MAKE THE PRINT

Having established the correct exposure, turn off the room light, slide a full sheet of paper into easel (28). \triangleleft Turn on the enlarger for the correct exposure time; avoid vibration. After exposure, quickly submerge \triangleright the enlarging paper in the developer (sliding it in edge first is best), agitate it with the tongs for 2 minutes. An image will start to come up in about 30-45 seconds. Don't pull the print out prematurely.

\triangleleft After 2 minutes in the developer pick up the print by one corner with the tongs, hold it above the developer tray to drain for about 10 seconds.

Drop the print into the shortstop, \triangleright being careful not to get shortstop onto the developer tongs. With the other tongs swish the print around in the shortstop for about 15 seconds.

(Continued on page 104)

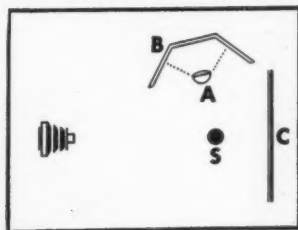




PERSONALIZE YOUR PORTRAITS

by HERMAN LEONARD

Donald O'Connor is usually portrayed on the screen as a bumbling sort of guy who is always in trouble as a result of his own misdoings. In real life, according to photographer Herman Leonard, O'Connor is the exact opposite. Leonard found him a mature, serious-minded person as well as one of the most talented actors he has ever photographed. After becoming acquainted, Leonard and O'Connor decided that they both wanted a portrait that would depict the latter's serious side rather than the comedy character so well known to the public. This picture was made with a 5 x 7 Ansco view camera while they were discussing the aesthetics of acting. Leonard simulated daylight by using a sealed-beam electronic



flash unit (A) to reflect light off a 7-foot folding screen (B) covered with crumpled tin-foil. The background (C) was gray. Exposure on Super-XX was made at f/11.

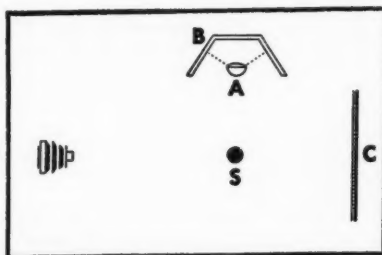
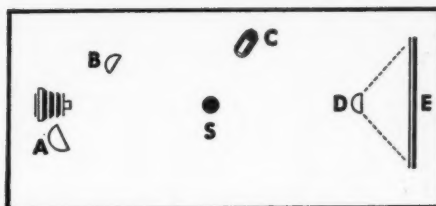
THE DIFFERENCE between an ordinary portrait and a fine portrait is a matter of interpretation. The first merely reflects the physical likeness of a subject; the latter goes beyond that to interpret a facet of the subject's personality. In short, a fine portrait invariably gives some insight into what makes a subject tick.

How does one go about getting a subject to project a personality trait that can be captured on film? I believe in doing preliminary spade work ahead of a shooting appointment. The more I can learn about a subject's personal tastes, habits, hobbies, and viewpoints, the easier it will be for me to steer our conversation into channels that intrigue him. Once a subject is genuinely interested in a discussion, his expressions become animated and his uneasiness dissolves.

I usually start a sitting with a twin-lens reflex camera, snapping a roll or two of film while waiting for the conversation to create a mood or attitude that is especially characteristic of the subject. By the time I am ready to switch to a 5 x 7 view camera, my subject is no longer distracted by the minor changes I make in the lighting set-ups.

While the naturalness and ease of manner I like to emphasize in a portrait are often best achieved by use of simulated daylight (described in the captions) I also use floods and spotlights when the mood of a picture seems to call for them. The important thing, in my opinion, is not so much the *type* of lights one uses. It is *how* he uses them to depict a personality trait which has been uncovered as the result of sincerity—plus a deep-rooted, mutual interest in the sitting.

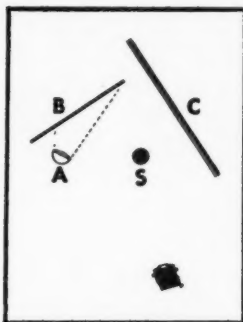
Lena Horne, *opposite*, was in an effervescent mood the day she appeared at Leonard's studio for this portrait. In keeping with her mood, he used a high-key form of lighting supplied by a 1,000-watt diffused flood (A), a 500-watt fill light (B), and a 750-watt spotlight (D). The white background is lighted by a 500-watt flood concealed from the camera by Miss Horne's body. All of Leonard's 5 x 7 view camera exposures are made on Super-XX. Exposure for this shot: 1/10 at f/11 with a 14-in. lens.



Jane Russell, *below*, was discussing religion when this picture was made. "Miss Russell," says Leonard, "is a sensitive and conscientious person, charming in manner and possessing a sparkle that isn't always apparent on the screen. I wanted to portray this charm clearly and honestly." Light from an electronic flash unit (A) was again bounced off a foil-covered folding screen (B) to simulate soft daylight. The background (C) was black paper. The view camera negative was exposed with a diaphragm opening of f/11.

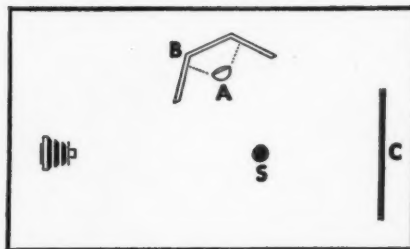


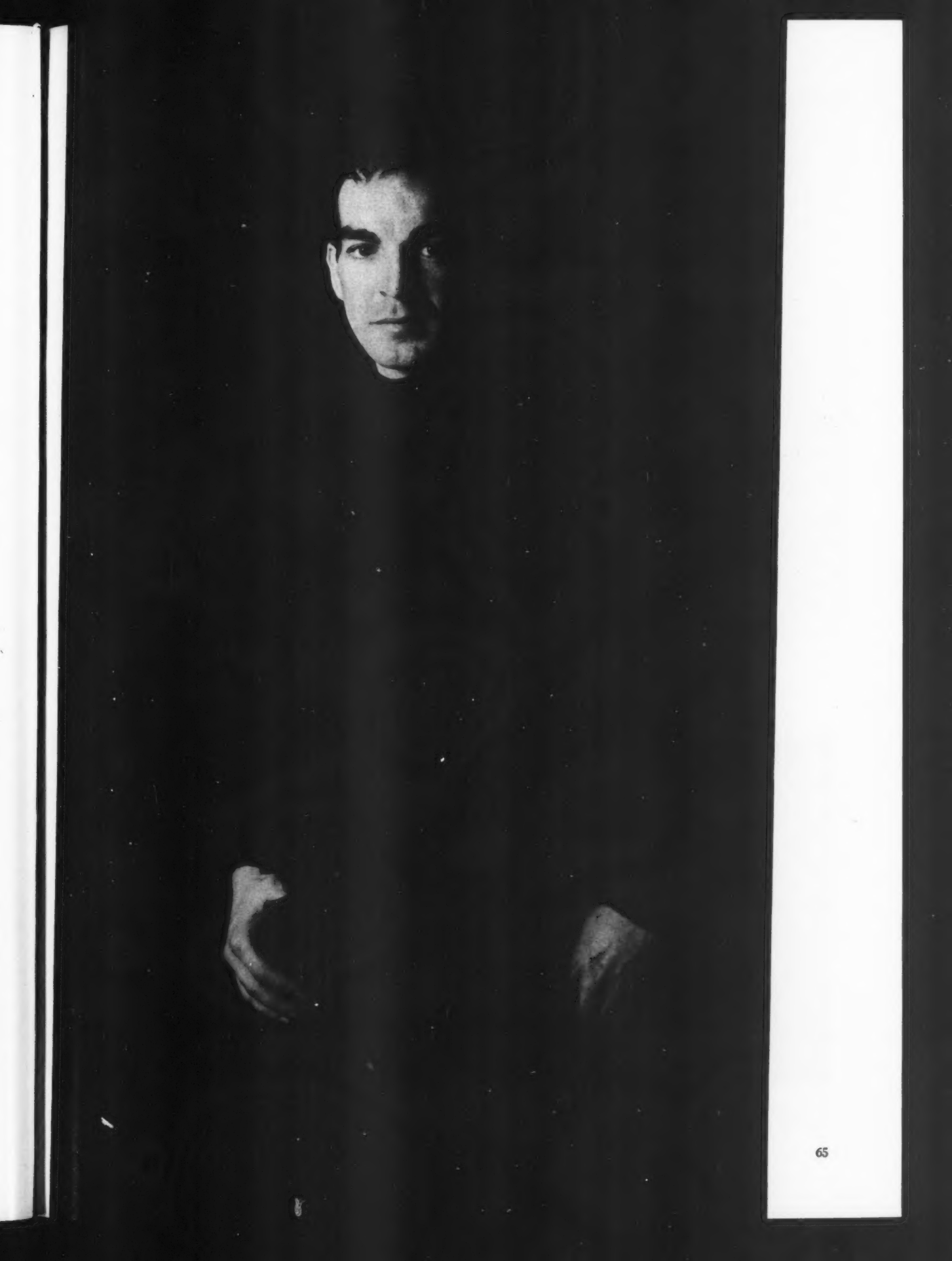




Joan Gray, *above*, looks as though she was photographed by natural light streaming through a window. Actually, the light source was an electronic flash tube (A) in a sealed-beam reflector. A square of tinfoil-covered cardboard (B) and the white wall (C) served to "bounce" the light back upon her head and shoulders. A corner of the tinfoil reflector can be seen behind Miss Gray's head; the diagonal gray band is a shadow cast on the wall by the tinfoil reflector. Photographer Leonard used a Rolleiflex for this shot, Super-XX film, and a diaphragm opening of $f/3.5$. He develops roll film in Microdol, dunks cut film in D-76, and develops by inspection for about two-thirds the recommended time. "This may not be according to Hoyle," says Leonard, "but I like the results." He tries to avoid retouching.

Paul Stevens, *opposite*, was photographed with much the same lighting arrangement used for the portrait of Jane Russell. Many of Leonard's portraits reflect what he learned during the six months he worked with Yousuf Karsh. "Mr. Karsh," he says, "is a master technician. More than that, he is a master at drawing out the true personalities of the people he photographs. I have had to take pains to develop my own viewpoint, influenced partially, but not completely, by Mr. Karsh's techniques."





H. Fox Talbot, Esq.

AN AUTHORITATIVE BIOGRAPHY OF THE GREAT ENGLISH
PHOTOGRAPHIC INVENTOR, SECOND PART, by BEAUMONT NEWHALL

For twelve years, between 1839 and 1851, there were two ways of making photographs. The daguerreotype process, invented by Louis Jacques Mandé Daguerre, gave pictures of remarkable brilliance, clarity and definition on metal plates. Each picture, like a jewel, was treasured in a velvet-lined case. The talbotype process, invented by William Henry Fox Talbot of Lacock Abbey, England, without knowledge of Daguerre's work, was a two-step technique. A paper negative was made in a camera (or by contact, putting objects on sensitized paper in sunlight). Positives from these negatives were made by contact printing them in sunlight. Editions of any number could be made from the negative. Since they were on paper, they could be pasted in books.

The chief value of Talbot's process was first demonstrated in his book, *The Pencil of Nature*, which he began to publish by instalments in 1844. In all, twenty-four actual photographs appeared, each chosen to show the capabilities and characteristics of his technique. Thus Plate III, a still life of rare chinaware (page 67), was submitted as an example of how a collector could

make a pictorial inventory of his treasures. Talbot pointed out, in describing Plate X, *The Haystack* (below), that his process would record an amount of detail "which no artist would take the trouble to copy faithfully from nature," and elsewhere he marvels that things can be seen in the picture which had not been noticed at the time of exposure. People appear in only one photograph, *The Ladder* (below). It was still difficult, in 1844, to take portraits because of the long exposure required. But Talbot wrote that "when a group of persons has been artistically arranged, and trained by a little practice to maintain an absolute immobility for a few seconds of time, very delightful pictures are easily obtained. Talbot not only illustrated many uses of photography within the range of his medium, but he prophesied what might be done with a more perfect technique. He had noticed that his paper was strongly sensitive to the invisible rays of the spectrum, and reasoned that, if ultra-violet rays were admitted to a dark room, pictures could be taken of people inside, shrouded in darkness, without their knowledge. "Alas!" he wrote, "that this speculation is



People appear in only one picture in Talbot's *The Pencil of Nature*, "The Ladder," because it was quite difficult in 1844 to pose subjects for the necessary long exposures.



Talbot pointed out describing "The Haystack" in *The Pencil of Nature* that his process would record an amount of detail "no artist would take the trouble to copy faithfully."

somewhat too refined to be introduced with effect into a modern novel or romance; for what a denouement we should have, if we could suppose the secrets of the darkened chamber to be revealed by the testimony of the imprinted paper."

The negatives of *The Pencil of Nature* were made by an improved technique which Talbot invented in the fall of 1840 and which he named the *calotype*. Instead of allowing the sensitive paper to remain exposed to light inside the camera until a visible image was formed, he found that he could develop the invisible, latent image formed by a very much shorter exposure. To make calotype paper, he first treated good quality writing paper with successive solutions of silver nitrate and potassium iodide. This he could do by daylight. He then made a mixture of silver nitrate, acetic acid, and gallic acid, which he called "gallo-nitrate of silver." Immediately before exposure the iodized paper was brushed with this solution. Exposure was shorter—a building in direct sunlight, for example, required only a minute with a lens working at the equivalent of stop $f/15$. The image was developed with the gallo-nitrate of silver used for sensitizing. It was fixed with hot hypo and washed.

Talbot patented the calotype process in 1841. His action in doing so led to a surprising storm of protest which even reached moral and ethical grounds.

Talbot had already patented three highly ingenious electric motors. In taking out a patent for his photographic invention he was following a well established practice. The patent did not cover the basic invention of photogenic drawing, which, in the interests of science, he had openly published with no restrictions of any kind. For it he had neither asked for, nor been given, any



Portrait of Talbot made in 1864. Geo. Eastman House col.



A still life of rare chinaware in *The Pencil of Nature* was submitted as an example of how a collector could make a pictorial inventory of his entire collection quite easily.

recompense. On the other hand, Daguerre had been handsomely rewarded by the French Government with a pension for life. Although Arago had said that France was proud to present the daguerreotype technique as a free gift to the entire world, Englishmen bitterly discovered that Daguerre had patented the "free gift" in England. A Frenchman resident in London, Antoine Claudet, had the monopoly. There were other patents, including one from America, of a reflecting camera. By 1841 photography was a prosperous business, and fortunes were being made. Talbot, who had spent his time, his talents, and a large part of his fortune improving photography, logically took recourse in the machinery set up for the very purpose of protecting inventors and insuring them some reward for their work: the patent laws.

Although Talbot advertised that a license could be obtained for as little as a guinea, and even at no cost if a certain amount of material were purchased from his establishment, there was a growing resentment on the part of photographers to the patent. The reason was not the economics. Photography had already become such an important and vital means of communication that it did not seem fitting that it should be patented like a mechanical device. English (Continued on page 108)

SIMPLE TECHNIQUES FOR COLOR STILL LIVES

by ANTHONY GUYTHER

Ever since photography traded in the lens cap for a shutter and the slow glass plate for high speed pan film, the still life has lived in partial eclipse save as commercial ad illustrations and dim, misty pictorials. The photographer has become preoccupied with taking a slim second of moving life and freezing it for posterity.

Actually, this turn of events has done a great disservice to the still life. As a teacher of depth of field, lighting composition, proportion and color combination, the color still life has no peer. Yet it serves not only as the means to photography but as the end as well. Look through art museums. Still life paintings abound. Cézanne, for one, spent nearly a lifetime perfecting his still life technique. And he wasn't painting still lifes just for practice as any Cézanne still life price tag will bear witness.

What then of the photographic still life? Here is your opportunity to prove and improve your photography. No chance snapshot possibilities here. It's your own personal composition, lighting and color combinations.

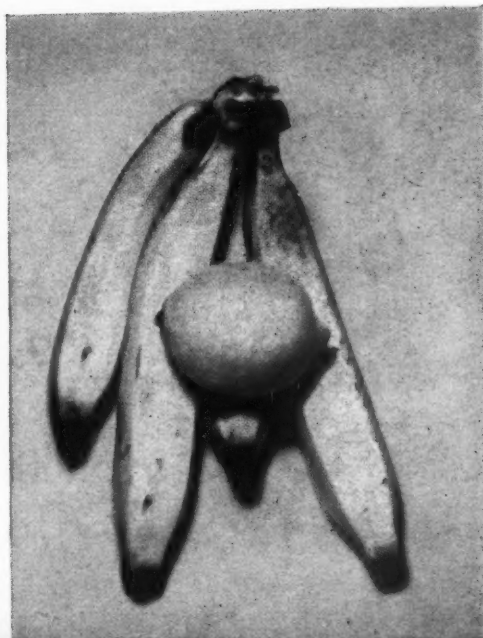
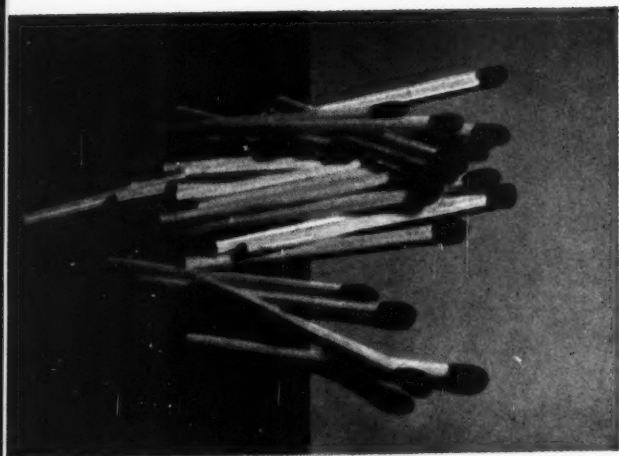
Let's discuss the purely mechanical aspects of taking still lifes in color before we get to the artistic. Any camera can be used. Some, of course, are more suitable than others. The best color materials—those which will yield the finest tonal values and give you the most satisfaction—are transparency type films. These, Kodachrome, Ansco Color or Ektachrome, may be had in one of the following sizes: 35mm, Bantam, 120 or in cut film. If you combine one of these sizes with a camera type employing a ground glass for

focusing you have an ideal instrument. Your ground glass will show you exact focus, changes in lighting and framing. It will also show depth of field—if you view through the taking lens such as in a single lens reflex or a cut film camera.

Most conventional hand cameras focus no closer than three or four feet without accessory lenses or extension tubes. These may be purchased in different lens strengths and different tube lengths, depending on the subject-to-camera distance at which you wish to work. A close-up lens or extension tube which will allow work at a distance of two feet will be most useful. With all but single lens reflex cameras and view cameras you will have the problem of parallax—the difference between what your camera's taking lens sees and what your finder shows you. The closer you get to your subject, the greater this difference becomes. With twin-lens reflex cameras accessory lenses to fit the top viewing lens will correct the parallax. With other cameras, a roll of black-and-white film run through your camera at a distance of two feet from a newspaper tacked on a wall will tell you just how much difference exists between your lens and finder. If your camera has a removable back, you can accomplish the same thing by taping a piece of ground glass

A group of old bottles from a closet and a grapefruit from the kitchen made the subject material. Light streaming through a window was the illumination. My Kodak Reflex was fitted with Ednalite Paralenses which acted as close-up lenses and provided parallax correction. Ansco Color was used. Exposure: f/11 at 1/50.▷





over the film plane and viewing the newspaper or still life with the shutter held on bulb or time. You will then know how much to compensate for parallax.

Numerous light sources exist for still-life color photography. But it is not our purpose here to get involved with the many filters necessary for use with the different films when exposed by electronic flash, flash bulbs, fluorescents, and the like.

To simplify our operation, let's deal only with daylight or with No. 1 or 2 Photofloods—all you really need. The table below should simplify any filter questions you may have. Now to our subject material.

When I decided to shoot still lifes and wondered what to use for models and backgrounds, I first looked around the house. A collection of colored glass bottles seemed good subject material. Some fruit could be thrown in for bright color and for shape. A brief look around your own home will produce similar objects.

Next, purchase from a stationery or art store large sheets of colored paper for backgrounds. Keep in mind your subject material and try to pick paper colors that will harmonize with and enhance it.

This paper can be used in a number of ways. It may act as a vertical backdrop when tacked to a wall or other support, as a floor for your subjects to be placed upon or as both. The last can be accomplished by taking a longish piece and tacking one end down to a table. Fasten the other end to a vertical support. This is called a seamless background and is used by a great many photographers when they

want a continuous solid color floor and background.

Now set up the camera on a tripod near the window. The distance to the table should be about two feet. Place the objects to be photographed on the colored material and try your hand at arranging.

I find it best to work fast in setting up compositions. If I spend about one minute, it's average time. When it takes longer than two or three minutes, I forget about it and get different props so that an unnatural, forced composition doesn't result. To shoot twelve different color shots with my Kodak Reflex takes me about an hour.

Once you have the hang of natural light still lifes and can operate your close-up attachments with accuracy, you are ready to tackle artificial light. I prefer using one flood in a reflector, moving it around my subject after setting up the composition to see the changes in lighting and where the shadows fall. A single light usually casts fairly heavy shadows as in my fruit arrangement photograph (*top, page 70*). I don't mind such shadows since I feel they give my photographs depth.

Now for a few loose ends. I don't see how you can deal with this still life problem without an exposure meter. And then a careful reading is necessary. Remember to read only the objects if using a reflecting light meter. Reading the background and subject together, particularly if the background occupies a good deal of the picture, can give you some badly exposed results. Also, when shooting with natural light, a Skylight filter will give your still life more warmth.

In any case, don't become discouraged after making one or two still lifes. Keep at it and you'll be surprised how your acquired knowledge of composition and color will help you in all your other picture taking.—THE END

◁ All three still lifes were made with the light of one photoflood bulb and Ektachrome, Type B with a No. 81A filter and Ednalite Paralenses fitted to my Kodak Reflex. The two fruit pictures were made at 1/5 sec. and f/22. I like dark shadows in my still lifes so did not use any reflectors or fill-ins on the fruit setups.

SOMETIMES YOU NEED A FILTER: THIS TELLS WHICH AND WHEN

Type of Film	Clear daylight through window	Overcast daylight through window	Photoflood lamps
Anso Color Daylight	No filter	U.V. 15	Conversion No. 10
Anso Color Tungsten	Conversion No. 11		U.V. 15
Ektachrome, Kodachrome, Daylight types	No filter	Skylight No. 1A	No. 80
Ektachrome Type B	No. 85B	No. 85B	No. 81A
Kodachrome Type A	No. 85	No. 85	No filter
Kodacolor Daylight Type	No filter	No filter	Not Recommended
Kodacolor Type A	No. 85	No. 85	No filter



problems in stereo portraits

by **BART BROOKS** *Dir., Stereo-Graphic Labs. Inc.*

PORTRAITURE IN STEREO presents a number of advantages over portraiture in any other medium, graphic or photographic. A stereo portrait, well made, is incomparable, except to the living, breathing original.

Photographers familiar with planar portraiture will find similarities in stereo, as well as a freedom from many of the conventional restrictions. The stereo users who have had no previous experience in portrait-making must review a few of the basic facts that are but the beginning of the planar portraitist's knowledge.

Lighting arrangements must be kept simple. For naturalness the greatest portraitists in painting and photography employ one predominant light, a "key" light, which seems to come from a natural and recognizable source—the sun, a candle, a ceiling fixture, a window. This key light, however, does not belong at the camera, glaring from eye level into the face of the subject. Such a light does not capture the facial contours familiar to us.

To demonstrate this, arrange a cooperative model in a comfortable position, with nearby room lights off. Using a 60-watt bulb (a photoflood is too strong for comfort) play the light on the features of your model from about six feet away, at eye level, and from directly in front. Rotate it slowly around the model a full 90 degrees to either side of center position. Observe from the camera viewpoint how the width of the face is exaggerated by the flat front light and how the face becomes more slender as the light is moved towards the side.

Now repeat the experiment with the light higher and then lower than model's eye level. Notice how low front light imparts a sinister, witch-like aspect to the prettiest model. Notice, too, that the light placed above eye level and 45 degrees to one side of center is usually the most "natural" and flattering. How high should the light be? Watch the shadow cast by the nose. It should seldom be allowed to cut across the upper lip. Even in stereo, the nose can be made to appear longer or shorter, flatter or thinner, as you move the key light.

For portraiture with a single light, the subject should be located relatively near the background if you wish to light the background as well. A reflector, used as a fill-in, will bounce light from the single bulb into the shadowy side of the subject's face and onto the background. This reflector may be made of crinkled aluminum foil, rubber-cemented to a heavy mount board. Smooth foil would cast hot spots. A smooth white cardboard, though reflecting less light, will do also. Notice that the reflector must be located quite close to the subject for desirable light balance (*left photo, page 72*).

In making portraits with two lights, after the position of the key light has been selected, a secondary or fill-in light is used to balance the shadowy side of the subject. The secondary light should be about half the intensity of the key light. Place the fill-in light a greater distance from the subject than the key light, or use a smaller output bulb. All these fundamentals apply equally to flash and tungsten light problems. (*Continued on page 116*)



◁ Good stereo portraits cannot be made with the flash or flood near the camera at camera level. The key light should be placed well above camera height. *Extreme left:* When using single flash, place it about 45 degrees from camera and light the shadow side with a reflector. Textured background, confusing in planar photography, will add stereo interest. *Center:* When using a fill-in flood, make sure it doesn't shine into camera lenses. Expose with careful meter reading. *Left:* Double flash may also be used, with a key light and fill-in. Reflectors can be made of white cardboard or crinkled aluminum foil pasted on board.

A solid color background, *right*, should be used whenever you make a close stereo portrait. There should be ample space at both the right and left edges of the frame. A patterned background, in this case, would produce severe eyestrain if the viewer attempted to see both subject and background satisfactorily. *Below:* The medium closeup portrait is easier to make. Here a patterned or textured background enhances the slide and can be viewed easily without eyestrain. The shadow, while not advisable in planar portraiture, increases the feeling of depth since it falls well behind the subject. This stereo pair was made with one flash.



In order to see double views in stereo, place piece of cardboard on white line at right angles to magazine. Place nose just above cardboard, so each eye sees one view. Images will fuse into one, which, when sharp, will be in stereo. Make sure you have plenty of light.

the Camera Clubs

by MABEL SCACHERI



For some reason unknown to me, January and February are usually the two best months in any camera club's year. During these months the attendance is the best, the pix turned in at the monthly contests the finest, the speakers the most eloquent, the new members the most numerous.

Besides, there are usually some photographic items left over from the holidays; presents from your loving relatives which made you fans get off those great big "just-what-I-wanted" lies. From this state of affairs the annual Auction Night has evolved in many clubs. The members bring in all sorts of photographic equipment, and the club wit presides as auctioneer. Everybody gets a good laugh, and you may even get a piece of equipment which you don't think is a turkey, although the other fellow did. Of course, the affair can be a Swap Night, and you can go back to the primitive barter method if you don't have a suitable auctioneer.

Since the club is likely to be at its peppiest this month, it is a good time to campaign a bit for new members. Those you can always use, since people do move away or get too involved in personal problems to continue in the club. It is better to keep drawing in new members than to let the club thin out until you can hardly keep going before you start to build it up again.

Instead of having a vague visitors-

always-welcome policy, why not arrange for a bang-up program—something not technical with a lot of good pix around for everyone to enjoy—and label it a Guest Night. Get your local paper to run a story about it. When such affairs are managed right, there are always a number of guests who want to join up.

With attendance at its best in January, that makes it a good month for voting on any changes in rules or policy. Some clubs find they have too many rules—the doings are too stiff and businesslike. Others discover they are not half businesslike enough. Complicated situations can be avoided if, at the start, the club insists on having a separate checking account at the bank, in the name of the club, with checks for dues made payable to the club and not to the individual "spark plug" fellow. Also, club equipment should have the name of the club lettered on in paint. Club records should include the serial numbers on club equipment and the sales slip from the store where it was bought. This is just sound business policy and no officer need feel there are any implications of personal mistrust.

Then, too, there are matters of policy in regard to monthly contests or annual shows. You may have a rule that no one member can win more than one prize, or score, in a contest. Many clubs tell me they have to have this

rule or a few members walk off with all the honors each month, and this discourages the others. Judges, on the other hand, are somewhat irked if, after picking the winners, they are told, "Sorry, but you have to choose another print. You have two by the same maker."

It should be possible to put some identifying mark on the corner of each print entered by the same maker, so that judges may know, without learning the maker's name, which set of pix are ineligible for more than one prize. Personally, I think if prints are entered in three categories, Beginners, Advanced, and Salon, for instance, then it should be a free-for-all in each class, and let the best man win, even if he makes a clean sweep. The losers can pull up their socks and do better work if they want to keep Charley Champion from getting all the prizes. But it's up to each club. You know your members and how they react.

January might also be a good time to start a club library. It always surprises me to learn how few good books on photography the shutterbugs read. You might ask generous club members to contribute books, and then buy one book a month out of club funds. Or, if a book is expensive, spread the price of it out over three months. Such books as "The Art and Technique of Color Photography," produced by Condé Nast, and "The Decisive Moment" by Henri Cartier-Bresson (reviewed in the December issue of MODERN, page 108) are among the more expensive and also the more worth while. When the bat-eyed beginner moans, "I don't know what kind of pictures you MEAN," whip out a book and show him just what you do mean.

I regret to state that it is very desirable to keep the library in a locked cabinet, with only the librarian having the key and charging out each book by having the member sign for it. People are notoriously remiss about book-returning. Two weeks should be the time limit, so the other fellow gets a chance to use them.

Many of the larger stores get out catalogues of merchandise which would be handy for the club to have, if only to show beginners the difference between various brands, and make them familiar with technical terms and trade names. You might even keep a file of manufacturers' pamphlets, if you have that kind of a club secretary. Camera fans suffer more mental anguish over the selection of equipment than they ever do over selection of good picture material!

January might also be a good time for a club debate on some nice hot controversial subject, such as Realistic vs. Pictorial Photography. I'd be the last one to say that such a debate would ever settle anything or convince anybody but it might start people to thinking and re-examining values. It would also be a change of pace from the routine talks and print judging. Don't let debate be all words and gestures. Make each side bring in pictures to illustrate every point.—THE END



"How do you like the new place I found to store your projector?"

Dependability is the new word in flash equipment... B-C extends range and performance.

Positive, dependable firing of one or several flash lamps is provided by the B-C (battery condenser) unit of the Ektalux Flashholder. Power, 22½ to 45 volts, to fire lamps remains ample and constant throughout the life of the batteries. Dependability, too, is built into the rugged design of the Ektalux. This is a truly professional outfit, instantly recognized and adopted as such by those who know their flash operation. The functionally designed hand-hold has the feel of rightness; you sense this the minute you pick it up.

The basic Kodak Ektalux Flashholder operates with internally synchronized cameras; for cameras with non-synchronized shutters there's an accessory solenoid and synchro-switch outfit, at \$21.60. Matching Extension Units, \$12.40. Depending on bracket, the basic unit runs from \$29.75 to \$33.85.



Kodak Ektalux Flashholder

Where flash requirements are not as complex or frequent, the new Kodak Standard Flashholder at \$8.25 is a thrifty answer. The strong, smooth plastic case is shaped to fit the hand... opens up to provide easier cleaning and reveal the simple, rugged internal construction—no wires... no soldered joints. Has positive spring ejector, kink-proof permanently attached cord; unit detaches easily and quickly from bracket for off-camera lighting. May be adapted to B-C operation with Kodak B-C Flashpack (\$2.95). The Flashpack may also be used with most other flashholders taking two "C" cells.

By the way, a 45-cent investment for the simple, plastic Kodak Two-Way Flashguard will relieve you of all your worries about those once-in-a-million flash lamp blowups. And the choice of clear or diffuse lighting it gives you makes for more flexible control. Comes with Standard Flashholder.



Kodak Standard Flashholder

The trend in picture taking... black-and-white or color... is toward use of filters for better light control.

With rare exceptions almost any picture can be improved through the use of the proper filter... to set off the clouds, bring out the detail in foliage, improve skin tones, or to better color balance. Your Kodak dealer has a complete assortment and will be glad to help you with your choice (Series V, \$1.75 and \$2.17; Series VI, \$2.07 and \$2.59). A real buy for use with inexpensive cameras is the Kodak Cloud Filter at \$1.72.

New Kodalux Highlux Projectors give more screen brilliance, provide maximum protection to slides, allow conversion.

Flexibility is the new word in slide projectors. Now you can start with a 300-watt power-cooled unit—or you can start with

a thrifty 200-watter, and convert it later by adding a blower case and 300-watt lamp. It's a new idea—and a help to many budgets.

In the 200-watt class is the new Kodalux Highlux II Projector, with convection cooling for both lamp and slides.

In the 300-watt class is the Kodalux Highlux III Projector, incorporating a powerful (but very quiet) blower in the carrying case base (see picture below).

Each Highlux Projector incorporates a brand-new, and improved, double-condenser optical system that gives you unbelievably brilliant screen images. Ask your Kodak dealer to demonstrate the difference. In both, the slides feed in from above, doing away with unintentional repeats and side-to-side jarring.

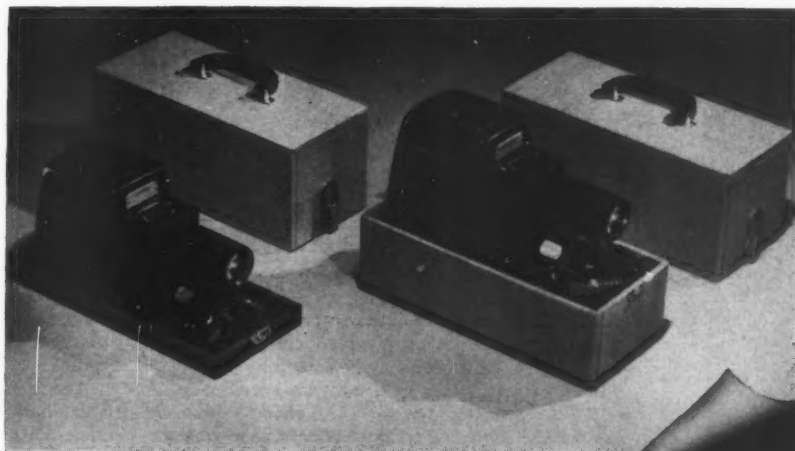
You can buy the Highlux III complete with blower case for \$56.50; the Highlux II for \$36.50. The blower case and 300-watt lamp can be added to the Highlux II at a later date for \$19.20 and \$2.59.

Wintertime is darkroom time... time to display the creative skills out of which come great pictures.

Your Kodak dealer is now featuring the latest Kodak darkroom equipment... Fluorolite enlargers, new 2-Way Safelamps, enlarging lenses, masking easels, Kodacraft Roll Film Tanks, chemicals, papers... everything you will need.

Prices include Federal Tax and are subject to change without notice.

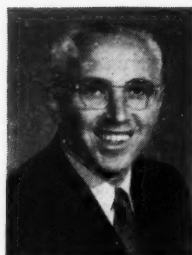
EASTMAN KODAK COMPANY
Rochester 4, N. Y.



Kodalux Highlux Projectors II and III

Kodak

IRVING B. ELLIS
FRPS-APSA



Experts' Choices For Fine Prints

No. 8 in an informative series . . . a leading contest winner states his secrets and preferences

Dr. IRVING ELLIS is an expert in a special field—the winning of photographic contest prizes. In the past twenty years or so, he has won more than seventy-five important awards. He won his first award in 1929, with a box-camera snapshot. In 1930, he took one of the top prizes in an international contest sponsored by the Eastman Kodak Company. He has won automobiles, watches, typewriters, cash—and an exceptional knowledge of the qualities a print must have in order to win.

These qualities, Dr. Ellis feels, are human interest; good lighting; and crisp, sparkling print quality. He is a life member of several camera

clubs, and a frequent salon judge—and he finds the three basic elements of picture success are just as valid in the formal salon as in the rough-and-tumble of a prize contest.

For many years, Dr. Ellis made all his salon prints on *Kodak Opal Paper*, and his contest prints on glossy *Kodabromide F*. Now, his enthusiasm goes to *Kodak Medalist Paper*. "I am very much impressed," he writes. "The first thing I noticed was *Medalist's* warmth, richness, and high speed, plus the crispness of a paper like *Kodabromide* . . . I can tell you right now *Kodak Medalist* is my No. 1 choice."



KODAK does not offer *Medalist* as a "universal" paper—but it does have a unique combination of fine qualities . . . rich warm blacks, excellent printing speed, a full range of contrast grades all matched in speed, excellent choice of surfaces, excellent response to toning, and superior flexibility of contrast control by varying the ratio of exposure to development. This combination is no accident; it was evolved through long research because serious workers asked for just such a paper. Carl Mansfield's famous 88-salon "Minnow Catching" is here reproduced from a print on high-lustre *Kodak Medalist J*. Note how it incorporates Dr. Ellis' three elements: human interest, good lighting, and sparkling print quality. For exhibition, Mr. Mansfield made his salon prints of "Minnow Catching" on *Kodak Opal G*, the long-time favorite of all salon papers.

KNOW YOUR KODAK PAPERS, FOR KNOWLEDGE SPELLS SUCCESS

These are the papers for fine exhibition enlargements, gift prints, home decoration, and specialized applications—in a range of types to fit your every need:

For fast printing, fine warm-black tones, and great flexibility in manipulation—*Kodak Medalist Paper*.

For rich neutral blacks in a top-speed paper—*Kodabromide Paper*. Five evenly spaced grades and nine combinations of sheen, texture, tint, and weight.

For rich warm blacks in a moderate-speed paper—*Kodak Platino Paper*. Three printing grades.

For widest choice of tint and surface in a paper of utmost tonal quality and adaptability to toning—brown-black *Kodak Opal Paper*. One printing grade.

For Opal quality with twice the speed of Opal—*Kodak Ektalure Paper G*.

For Opal quality in a special fine-grained surface suited equally to exhibition and reproduction—*Kodak Illustrators' Special*.

For photomurals—*Kodak Mural R*.

For transilluminated prints—*Kodak Translite Paper*.

For extra-fast printing and processing—*Kodak Resisto Rapid N*. It's as fast as *Kodabromide*; and its special base allows washing and drying in ten minutes.

And for contact prints—*Kodak Azo*, *Velox*, *Resisto N*, and others. Each Kodak enlarging paper has a contact-paper counterpart, equivalent in type and quality.

For full details on these fine Kodak papers—tints, surfaces, weights, processing—consult the Data Book on Kodak Papers, and your Kodak dealer.



"Judy," Dr. Irving Ellis, Piedmont, California. Print on *Kodak Medalist F* (glossy, white). The original, of course, has a quality and tonal range that cannot be fully retained in ink-and-halftone on high-speed presses. For Dr. Ellis' appraisal of *Kodak Medalist Paper*, see facing page.

EASTMAN KODAK COMPANY
Rochester 4, N. Y.

Kodak

Wintertime Traveler... or Stay-At-Home

**the Cine-Kodak Royal Magazine Camera
makes the season memorable**



*Kodak Cine Ektar Lenses are those which qualify—without reservation—as the finest ever made for 16mm. and 8mm. cameras. Even when wide open, they meet the highest standards of definition, edge-to-edge sharpness, and flatness of field... to give you pictures you'll always be proud to show.

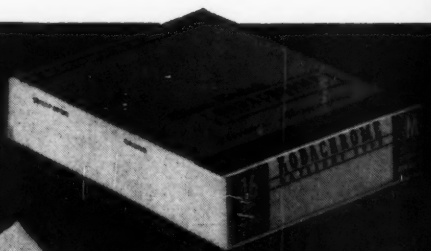
Wherever you are . . . wherever you go . . . whether the scenes you'll treasure are of a palm-fringed tropical beach, a Laurentian ski run, or the children's back-yard snowman, you'll like what you get with the Cine-Kodak Royal Magazine Camera.

Here is the personal movie camera that *does everything*. In crisp color or black-and-white, indoors or out, this superb 16mm. camera makes "big" movies at normal speed or in slow motion . . . gives you single-frame exposures for animations or time-lapse pictures . . . gets long-range shots by accessory telephoto, or focuses down for "close-ups" a mere 12 inches away. It's magazine loaded, for greatest ease and speed of use.

Take it with you . . . keep it with you. Keep your memories alive in movies. Ask your Kodak dealer for the Cine-Kodak Royal Magazine Camera, 16mm., with superb "Ektar"* f/1.9 Lens. \$176.25.

Price includes Federal Tax and is subject to change without notice.

EASTMAN KODAK COMPANY, Rochester 4, N. Y.



Kodak

Dr. Cinema Says . . .

***Simplifying your editing job
can make it almost painless***

Comes now the time of year when a lot of us finally get around to editing the footage we shot last fall. But as we screen the stuff, the job of rearranging it looks more imposing by the minute. What ever happened to those laudable plans we had for filming each subject according to script—the resolution we made to shoot *this* one right?

Well, just for example, when the family safari got to Niagara Falls you came into the area below the falls and worked your way upstream, necessarily filming as you went. It didn't occur to you until now that the picture story should begin *above* the falls, showing successively the swift-running river, the breath-taking drop, then the whirlpool and the rapids downstream. So this means rearranging the sequence of scenes right from the start. By the time you figure in the occasional overexposures, fast-pan blurs, and other bad footage that must be deleted, the prospect of editing drives you back to watching even worse films on television.

Any shortcut to getting your editing job started would help, you say? All right, here's a modest plan whereby you can get into the thing almost painlessly.

Start with one reel of film—any reel—just as it came back from the processing lab. Equip yourself with a pencil and paper, and start projecting this film. Write on the paper a number and a brief description for each scene, good and bad. Your notes may run something like this: 1, Entering Gettysburg; 2, town scene; 3, closeup of road marker (overexposed); 4, panorama long shot (last part too fast), and so on.

When you're through projecting the reel, scan your notes. You'll soon have a rough idea of how you want the scenes rearranged, which ones should be shortened or cut entirely, and so on.

Next, use a colored pencil to re-number the scenes in the order in which you want them to appear. At the same time, check off the individual scenes which are to be eliminated.

Now you are ready to cut the film apart by scenes, placing each section of film in the desired order as you go. A bunch of typewriter ribbon cans and lids, having numbers painted inside them with red nail polish, will do as receptacles for these lengths of film. Tack the cans and lids to a sheet of plywood and they'll stay put.

When your film lengths are cut apart and placed in their numbered receptacles, you're all set to start splicing them together in their proper sequence. From here on it's your baby, but you'll find that this running start has greatly simplified your task.

* * * *

A friend of mine had been having a lot of trouble with lack of color fidelity in his movies. He complained bitterly as one reel after another came back from processing with what seemed to be poor color rendition. Even after making allowance for his possible miscalculations of exposure I couldn't figure the thing out, so I went over one evening and had him project a few hundred feet for me. Here's what I found:

First, his projector lamp was living on borrowed time and gave nowhere near the amount of (Continued on page 102)

MOVIE SECTIONS

Chaplin: the best of the

BY HERBERT KEPPLER

THE MOTION-PICTURE WORLD is divided in two camps—the amateur and the professional. The amateur writes, directs, produces and perhaps acts in his films. He projects them for his own and his friends' enjoyment.

The professional is a specialist. He may direct or produce or write or act. He has always to keep one salient fact in mind—will the picture make money?

By this definition, Charles Spencer Chaplin began making movies as a professional and has become through the years the greatest amateur of them all. We have his word for his status:

"That's all any of us are—amateurs—we don't live long enough to be anything else."

Actually, those words emanate from the mouth of Calvero, the character Chaplin portrays in his latest film, *Limelight*. But in a very real sense Chaplin is telling the truth about himself. He is the director, the author, and the producer. He has made a film largely to please himself and his friends. His camera and lighting technique are outrageously simple. No faces, no trick montages, no optically printed scenes, a few pans, one dolly shot, one dissolve, and one unusual angle scene (page 81, right).

What, then, makes this new Chaplin effort effective pictorially? Two elements: the very artless simplicity of its making and the person of its main actor, Charles Chaplin.

In *Limelight*, Chaplin plays a has-been English music-

hall comedian who nurses a bad heart with ample doses of alcohol. He saves a young ballerina from suicide and helps her to regain confidence. He tries an abortive comeback and fails while she climbs to the heights of a ballet career. He is later given a benefit during which he proves himself again to be the great master comedian of his earlier years. He dies of a heart attack which occurs at the end of his performance.

That's the simple story line. But Chaplin turns it into a classic Columbine and Punchinello romance. The audience is made to laugh and cry almost simultaneously. No comic relief ends without tragic overtones. No bit of tragedy or melodrama terminates without laughs. And no one could have taken such a formula and been so successful with it save amateur Charles Chaplin. Without getting into a controversy over the merits of the extensive dialogue, let's examine Chaplin's stronger cinematic abilities.

The success of *Limelight* pictorially is the story of the face of Chaplin. Unlike the present crop of Hollywood and foreign actors, he learned the motion picture medium without benefit of sound. And while heavies threw their hands around like windmills to express the emotions that the silent screen couldn't deliver, Chaplin concentrated on the more subtle facial and body expressions which would connote emotion to the audience. He became the master pantomime artist, perhaps of all time.



e amateurs...

Chaplin seldom uses tricky angles in *Limelight*. One exception, however, is in the main ballet footage during a scene change. The audience has been watching from the footlight side, except for dramatic incidents happening back stage. Suddenly the camera is repositioned to a place high in the theater's wings. It becomes a dispassionate chronicler. The scene below the camera, which as the curtain fell showed Columbine's ballet death, suddenly comes to life. As Columbine is helped off her couch, the workmen start to disassemble the scenery. The action progresses swiftly and gives the impression of a flower bud suddenly opening and then vanishing as the camera finally records a completely bare stage (frames at right, top to bottom). During the sequence the actors below resemble mechanical mannequins. Although this camera angle hits the viewer with a jolt after the many conventional camera positions seen previously, it is highly effective in aligning the viewers' sentiments and associations with the players instead of the audience. Directly below is a strip of three frames from a favorite Chaplin camera angle with which the movie is replete. Here the camera places the subject at head-and-shoulders distance, directly in the center of the frame. It is then up to the actor and lighting to create the action.





The end of Calvero's flashback dream sequence contains one of the most brilliant pieces of pantomime on film. For approximately twenty seconds there is no dialogue, only a concentration on Chaplin's face as he first receives the acclaim of the music hall audience. Suddenly, the applause dies to a dead silence and a brief cut shows an entirely empty theater. The camera again picks up the haunted face of Calvero and then dissolves into the face of the awakened



Another example of Chaplin pantomime occurs when Calvero fails in his comeback try. Harsh lighting on a cold-creamed face and black shadows in the eye sockets emphasize complete failure and age (see text).

When sound arrived, Chaplin resisted it as best he could. Indeed, the little tramp with the small mustache, baggy pants and cane never did learn to talk. But Chaplin could not resist progress and *Modern Times* (1936) saw the last of the mute hero. *The Great Dictator* (1940) was a transition movie in which Chaplin talked for the first time. But when he was ready to embrace sound completely, a new Chaplin emerged, minus his traditional props. *Monsieur Verdoux* appeared (1947) as a satiric comedy in which Chaplin played a modern Bluebeard. But in *Limelight*, Chaplin plays himself.

In *Limelight* he created a character, Calvero, who recites Chaplin philosophy (unfortunately, to the point of verbosity at times), and is the kind, aging comedian Chaplin hopes he is. Calvero is endowed with Chaplin's greatest artistic gift, pantomime. Sound and dialogue accompany the picture rather than form an integral part of it.

Let's examine one comic scene (followed of course by tragedy) to see how an actor's genius for pantomime can change the scenic mood.

One night Calvero dreams of his old successful music-hall routine in which he does a trained-flea act with fleas invisible to everyone but himself (*four frame enlargements above*). At the end of the act, the crowd cheers him uproariously. His expression shows his elation. Suddenly the cheering stops and with the smile still on his lips, a perturbed expression enters his eyes and the smile becomes strained. The camera cuts to a shot of an entirely empty theater (*not illustrated*) in which there is dead silence, then back to a closeup of the apprehensive Calvero. This face dissolves and is replaced by the face of the now awake Calvero full of nightmare memories. The entire change runs for roughly



dreamer. These four still frames cut from the film only give evidence of a few Chaplin expressions as he runs the gamut from joy to wonder to horror and finally to disillusionment. The viewer has barely time to stop laughing over the music hall routine before he is called upon to share Calvero's horror in the nightmarish ending to the scene. This swift shift from one audience emotion to another occurs frequently. The audience is wrung emotionally dry before the picture ends.

twenty seconds and is one of the greatest bits of subtle pantomime on film. It bears study for both amateur and professional motion-picture makers.

Chaplin rarely uses dramatic lighting to enhance mood changes. He relies on acting almost completely. In two cases however, technical knowledge was put to work to enhance the dramatic effect. At one point (*bottom photos, pages 80 and 81*) Calvero sits alone on the ballet stage, a down-and-out comedian who has just seen the girl whom he has saved from suicide try out for a new ballet. She has proved herself a great ballerina. No one notices the once-great Calvero. Everyone leaves the stage. The lights are slowly turned off. Throughout, Chaplin's face holds one expression. It has no smile or pout, joy or sorrow. He seems to be seeing his own rise to fame, his downfall and the wonder of his protégée's recovery and dancing. The lights fade until only the compelling Chaplin eyes remain. No dialogue has been spoken, yet Calvero's eyes have said more than any script writer could fashion for his mouth.

Another outstanding piece of pantomime occurs as Calvero takes off his makeup after his comeback disaster. Here he attempts to show the weariness and age of the broken comedian (*page 82, center and bottom*). The air of despondency is further heightened by his cold-cream-covered face. As he removes his cold cream, the camera cuts to a closeup. A spotlight from the right illuminates Calvero's face but leaves his eye sockets in shadow, giving him the appearance of a corpse. It picks up the lines in his forehead and the bags underneath his eyes. There is no dialogue.

This, then, is Chaplin's secret—underplay, pantomime and, whenever necessary, simple changes in lighting—nothing, technically, that the amateur movie maker

couldn't reproduce with a couple of floods and a spot or two.

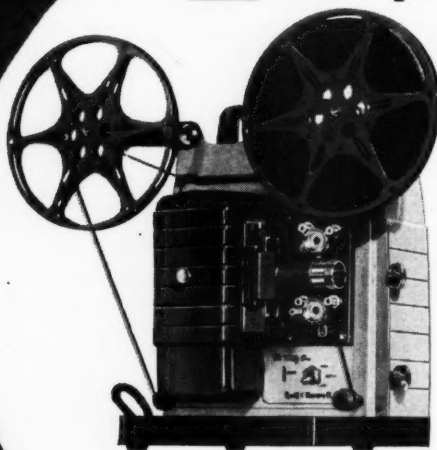
Limelight has been attacked as a movie whose filming technique died twenty years ago. If simplicity and fine acting died twenty years ago to be replaced by the tricks of the optical printer, color, fades, dissolves, countless dolly and pan shots, the screen is the poorer for it. Chaplin's technique allows his characters to be built up from within. His Calvero and ballerina are not mere actors and actresses reading lines. They are Calvero and a ballerina from the heart and mind. No cardboard figures, but three-dimensional living beings.

The amateur movie enthusiast can perhaps learn more that he can apply from watching *Limelight* than he can from any other Hollywood production: 1. Concentrate more on what is filmed than on trick techniques. 2. Show changes of mood by closeups of the principal actors or actresses. 3. Pick actors or actresses for their ability to use facial expressions rather than gesticulations. 4. Use lighting to heighten the mood but not unless absolutely necessary. 5. Keep pans, fades, dolly shots to a minimum. They often distract rather than add to a picture. After a trip to see *Limelight* you can add many more items to your list.

Of course, learning from Chaplin and copying his technique is a far cry from being as successful as he has been in *Limelight*. His methods can be studied and analyzed easily as we have done, but there remains that intangible thing called genius to reckon with. For Chaplin has mixed a rare elixir in *Limelight* of acting, directing, producing and writing. The ingredients of the brew are known but the order of mixture and the quantity of each remain secrets of the master mixer, and it is unlikely that any other cinematic bartender will achieve quite the same result.—THE END

BE A PERFECT SANTA!

How about
this **fabulous**
new 8mm projector?



The **221**
is really news!

Modern streamlined design. Light weight (12 pounds)! Sparkling performance. A snap to thread. *Never* needs oiling. And, of course, it's precision-built in true Bell & Howell tradition. Make sure you see your 8mm movies at their brilliant best... with the newest of all Bell & Howell projectors.

ONLY **\$99⁹⁵**
with self-contained case

172-B

8mm magazine-loading camera. Five speeds, positive viewfinder, 9-foot film run, single frame and continuous lock. With 1/2-inch f/2.5 lens,

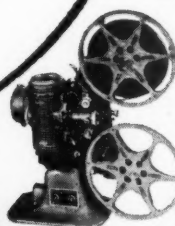


***134⁹⁵**

REGENT

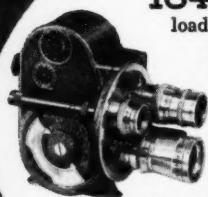
8mm projector

Brighter movies than any other popular make 8mm projector. Full half-hour show with 400-foot film capacity.



***179⁹⁵**
including case

134-TA 8mm spool-loading camera. Versatile, compact, light weight. Three-lens turret with positive lens-matching viewfinders, five operating speeds, and many other outstanding features.



With 1/2-inch f/2.5 lens only,

***129⁹⁵**

DIPLOMAT

16mm projector

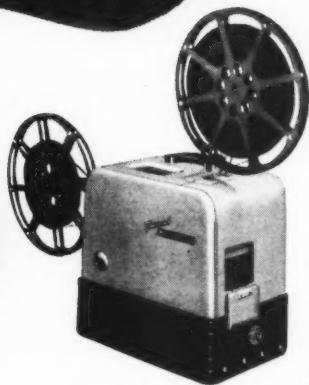


Quiet, smooth operation. Film completely protected—picture area never touches metal.

***299⁹⁵**
including case

Bell & Howell makes it fun to

Choose here for the movie-maker on your list!



Filmosound 202

16mm
RECORDING
PROJECTOR

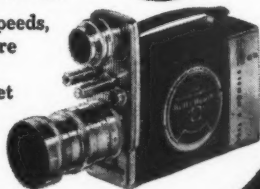
The optical and magnetic recording projector that enables you to add sound to any 16mm movie, replace obsolete sound tracks with new sound. Simple controls. Recording errors easily corrected.

From \$699

200 16mm magazine-loading MOVIE CAMERA

Five operating speeds, built-in exposure guide, positive viewfinder; turret model with 1-inch f/2.5 lens only, \$234.95;

single lens model, \$189.95

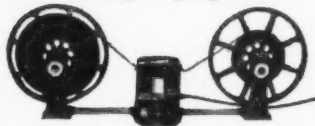


Bell & Howell Lenses

8mm and 16mm ... Wide angle, speed and telephoto ...

A complete range to meet every distance and light condition.

Editing Equipment



Splicers, viewers, rewinds, complete editors ... select from a full line for every purse and purpose.



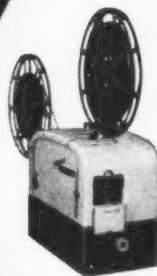
70-DL Master of

16mm cameras.

Versatility professionals demand. Seven speeds. Parallax correction. Hand crank. Takes single or double perforated film.

22-foot film run. With 1-inch f/1.9 lens only, \$365.50

Filmosound 285



16mm projector for sound or silent films. Compact and light weight, completely contained in one case. Easy to use.

\$449.95



Carrying Cases

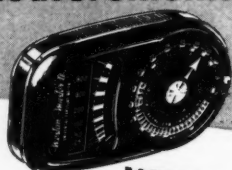
Sturdy carrying cases of top-grain London tan cowhide. Complete variety of sizes to fit every B&H camera.

make (and show) movies!

All Bell & Howell products are guaranteed for life

Start right...
finish right

with precise
WESTON
measurements!



WESTON Master II Exposure Meter

Widely preferred because it gives you complete exposure control in shooting color or monochrome, with all types of cameras. The meter for perfect transparencies and prints. At all dealers.



WESTON Thermometers

Precision, stainless steel thermometer for the darkroom. Easy to read...resists breakage...resistant to all solutions...accurate to within 1° F. over entire scale. Fits tanks, trays, graduates. At all dealers.



WESTON Analyzer

A densitometer for exact processing control...in either black-and-white or color work. Ask your dealer for a demonstration, or write for complete information.

WESTON Electrical Instrument Corporation
617 Frelinghuysen Avenue, Newark 2, N. J.

CASHING IN ON 16mm MOVIES

Thousands of villages in America's hinterlands are too small to support a regular movie theatre. To an alert movie-minded hobbyist, these entertainment-hungry rural areas represent a potential gold mine.

Typical of those who are cashing in on their 16mm sound equipment are Cliff Adams and R. L. Rains of the hill village of Port Royal, Kentucky. By day, Adams runs a pool room; Rains is an electrician. Each weekday night, however, they set up an outdoor theatre in one of six villages comprising their "movie circuit." The same movie is shown "for free" in each village, followed by a different movie the next week. In fair weather their Western movies often draw up to 2,500 people; on rainy nights people crowd into as many cars as can approach the screen.

Two bedsheets sewn together provide



Show night in a village often draws crowds of 2,500 people from hills and farms. Local merchants foot the bill.

the screen. In some villages the power company permits Rains to "cut in" on the power line for current because their shows are good business for the town. Each week the movie is held in the same spot, generally a vacant lot provided free by the town. By strange coincidence, (Please turn to page 88)



Bedsheets provide the screen; electricity is "cut-in" from the power line.



"Slide Cooling" PROJECTOR



Years ahead

... because only SKAN gives the positive protection of patented "Slide Cooling" ... the speed and ease of advanced "touch" controls ... the "Pre-viewer" window that lets you "see" before you show. See SKAN today—3 beautiful blower-cooled models for all 2 x 2 slides—priced from \$29.95. A product of G-M LABORATORIES INC.

4274 NORTH KNOX AVENUE, CHICAGO 41, ILL.
For Black and White and Color Photography



New Model IV D
A MASTERPIECE IN 35 mm CAMERAS
• f/4 (43mm) Coated Anastigmat Lens.
• New double-bladed shutter with accurate speeds 1/250, 1/50, 1/100 and B.
• All-metal case.
• Helical Focusing Mount...2.2 feet to infinity.
• Iris-diaphragm 1:4 up to 1:22.
• Built-in flash synchronization.
• Automatic film stop and exposure counter.
• Light in weight—simple to operate—compact, streamlined, sturdy.
• Holds standard cartridges for 20 or 36 exposures (film No. 135).
ONLY \$29.95 (incl. F. E. Tax)
Ever-Ready Leather Case \$6.75
See your Photo Dealer today, or write:
THE BENNETT COMPANY
637 Howard St. San Francisco 3, Calif.

THE PROFESSIONAL FINISH EXCLUSIVE FINE GRAIN 35 M & ROLL FILMS

Free Price List & Mailers
AMATEUR PHOTOGRAPHIC SERVICES INC.
126 W. 46 St., New York 36, N. Y. Dept. M

DON'T MISS THESE WONDERFUL BARGAINS IN LENSES & PRISMS

We have Binoculars, Magnifiers, Telescopes, Photographic Gadgets. Literally millions of War Surplus Lenses and Prisms for sale at Bargain Prices! Achromatic Lenses, Condensing Lenses, Tank Prisms, Bubble Sextants, Polarizing Attachments, Periscopes, Filters, etc. Catalog "M," FREE on request.

Send \$1.00 for Stock 2-M for 10-Piece Lens Kit and Big Instruction Booklet.

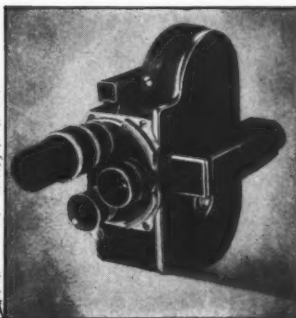
EDMUND SCIENTIFIC CORP. BARRINGTON, N. J.

What do I want for Christmas?

...I'm glad you asked...



L-8 ME on Christmas morning with a beauty of a Bolex. All ranges of speeds, adjustable finder, fixed focus $f/2.8$ lens and wrist strap. \$97.00. A focusing mount lens and zipper case can be had for \$19.50 additional.



GIFT SUPREME is the Bolex DeLuxe with exclusive Octameter finder on both H-16 and H-8 models. Bolex H-16 DeLuxe with Lytar $F:1.9$ \$372.75. There's a Bolex H-8 Leader with Lytar $F:1.9$ for only \$291.50.

M-8 PROJECTOR assures a brilliant future for home movies. The only 8mm projector with so many fine features. Snap-threading and single-control settings. Big picture quality is assured with the M-8. \$176.50



STEREO MOVIES! newest achievement of the movie world. Stereo taking lens fits turret of H-16 DeLuxe, Stereo projecting lens replaces most present modern projector lenses. Offset bracket for Octameter, Stereo screen and Polaroid glasses. \$397.50 without camera.

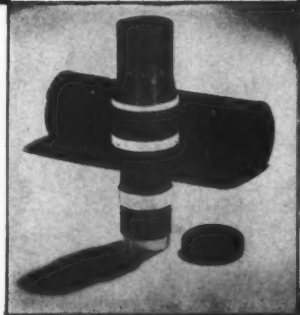


JUST IN CASE! The latest zipper job. Rich russet tan leather with shoulder strap, lush velvet lining, oodles of room for extra accessories — holds any Bolex H model camera. H-2 Zipper case . . . \$32.50.



GUN STOCK! Aim that Bolex with a smile, Podner! Here's a reacher that gets its quarry every time. Carved walnut gunstock designed by Laszlo for game hunting in Africa...it's sure fire. \$126.00.

NEW OUTLOOK! Not just one viewpoint, but a whole new way of looking at things! That's what a full turret offers. Kern-Paillard lenses have Visifocus...the automatic orange dots that assure correct depth of field on every shot. 16mm lenses \$76.50 to \$145.75.



ZOOM! Pan Cinor variable focus lens with coupled viewfinder and standard "C" mount. Fits practically all 16mm cameras. Large $f/2.8$ aperture is ideal for color coverage of fast indoor or outdoor sports. \$447.50.



These items are distributed to Bolex Franchised Dealers by the exclusive Importers: Paillard Products, Inc. 265 Madison Ave., New York 16

Nothing that

Bolex®

doesn't have!

JANUARY, 1953

PLEASE SAY YOU SAW IT IN MODERN

87

THE BEST CHRISTMAS GIFT FOR YOURSELF AND YOUR FAMILY

NO EQUIPMENT
AT ANY PRICE
WILL GIVE
YOU MORE
SATISFACTION!

FOTOLARGER
Professional results
at amateur prices

16 ★ features for uniformly brilliant prints
Neg. size 35mm. to 4" x 5" Available in model 1000
All models are unconditionally guaranteed



Model D 35mm to 2 1/4 x 3 1/4

\$28.50

WRITE FOR FREE LITERATURE
TESTRITE INSTRUMENT CO. INC.
NEW YORK 3, N.Y.

TRIPOD
ELEVATING ACTION

Lightweight aluminum with single lock panhead
No other tripod
with elevating action priced so low

\$16.95

for 2 section model, 3 section model \$19.95

CASHING IN ON 16MM

(Continued from page 86)

the lot is usually on "Main Street"—and all stores stay open on show night! Merchants report a 40% increase in business on these nights.

Rains and Adams each invested \$325 in order to buy a second-hand Victor "40" projector, Atlas amplifier, and minor accessories. Each feature film is rented by the week from a Louisville supplier for \$20. In bad weather they hoist the projector into the back of a pick-up truck and go on with the show.

Although Rains and Adams each clear about \$50 a week on their movies, the audience never pays a cent for admission. Instead, each merchant in the village chips in about \$2 a week, and pays



Adams and Rains start show rolling. Each partner nets about \$50 a week.

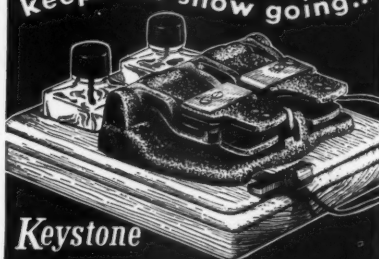
\$1 a week for each special advertising slide that is shown. That's the only revenue needed to keep things going to the advantage of everyone concerned.—George Laycock



Regular patrons, above, take time to "roll one" before the show. Kidlets, below, find choice seats on the car roof.



keeps the show going...



Keystone

FILM SPLICER

Don't let broken film spoil your home movie show—make quick, easy, neat splices right at your projector in LESS THAN 60 SECONDS! Perfect registration with either 8mm or 16mm film, positive shearing action from stainless cutting edges. Sturdy cast steel in handsome crinkle finish mounted on polished hardwood. Complete with scraper, water bottle, Keystone cement.

If your dealer cannot supply you, write to Keystone Manufacturing Company, Boston 24, Mass. for name of dealer nearest you.

Keystone

THIS NAME IDENTIFIES THE FINEST LEATHER CAMERA BAGS IN THE WORLD...
Perrin
CALIFORNIA
AT BETTER CAMERA STORES
WRITE FOR COMPLETE ILLUSTRATED FOLDER

J. B. Perrin & Co., Inc. 8510 Warner Drive
Culver City, Calif.



Unusual Color Titles

Put ZIP into your shows. Delight your friends with a humorous "professional" touch. For real showmanship, introduce these titles at the right time and wait for the raves. Different—cleverly designed 2 x 2 color slide titles—using pretty Hollywood models. ACT NOW—Set of 4—\$1.50. Free Catalog and sample slide title—Send 25c to cover mailing.

HOLLYWOOD SPECIALTY PRODUCTS

6253 Hollywood Blvd., Suite 1028
Dept. M1, Hollywood 28, Calif.

Wherever you are... For the BEST BUY or TRADE
See or write
QUALITY CAMERAS SINCE 1890
Bass Camera Co.
179 W. MADISON ST.
CHICAGO 2, ILL.

The editorial assignment read: "Go to United Nations Security Council meeting and photograph delegates in action. Look for colorful shots of well-known delegates. You will have to shoot with available light from across room because U.N. does not permit use of flash in Council chamber nor close approach to delegates during meeting."

These are the instructions given famous French magazine photographer Nick de Morgoli. The photographic problem was clear—dim light and great distance. De Morgoli required the most versatile equipment available. His choice: a 35-mm. Exakta VX with a very fast telephoto lens. His reasons: The Exakta's single-lens reflex system would give him the exact picture he saw in the viewfinder, an important asset in all photography, but vital in presswork. The Exakta's bayonet lens mount, permitting instant interchange of lenses from 35 to 500 mm., meant he could use a long focal length lens to approach his subject optically even though prevented from doing so physically.

With the Exakta he could use 36-exposure rolls and take a great number and variety of pictures. He could eliminate the risk of missing important shots by decreasing film changing to a minor affair. These reasons and others make the Exakta the foremost press camera to many newspaper and magazine photographers in addition to Nick de Morgoli. The Exakta is the ideal camera for covering all kinds of events. Its versatility, adaptability, single-lens reflex system and economical and simple operation put it in a class by itself.

Topnotch press photography is Exakta Photography, the single-lens reflex system. We invite you to inspect the model VX, the newest achievement in camera design, at your dealer. Available with the newly designed, T-coated, 50-mm., f/2.8 Zeiss Tessar with pre-set diaphragm mechanism at \$269.50 and with the new T-coated 58-mm., f/2 Zeiss Biotar with pre-set diaphragm mechanism at \$343. Meyer 250-mm., f/5.5 Tele-Megor lens, \$132.15 additional.

EXAKTA CAMERA COMPANY
46 West 29th Street, New York 1

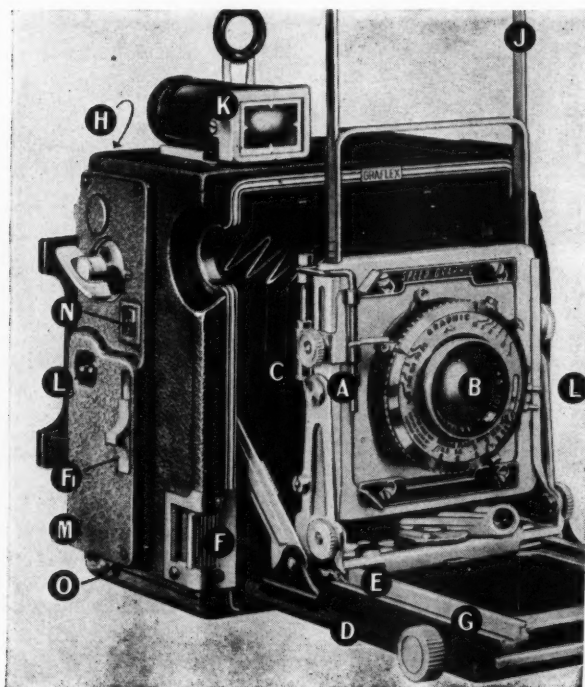


PRESS PHOTOGRAPHY IS EXAKTA PHOTOGRAPHY



Write for free booklet 1-PM about the Exakta VX. Owners of any model Exakta registered with us regularly receive free the magnificent *Exakta* magazine. Write us for information.

A PACEMAKER GRAPHIC



- A CONTORTIONIST FRONT.** For corrected perspective whenever you want it. Simple controls raise or lower the lens, shift it sideways, or tilt.
- B INTERCHANGEABLE LENSES.** A flip of the slide locks and your lens is ready to be replaced with a portrait, wide-angle, telephoto or other accessory lenses.
- C DOUBLE EXTENSION BELLOWS.** For extreme close-ups. Permits full-size copy with standard lens. Invaluable too, when using special lenses.
- D DROP BED.** Helps correct perspective in conjunction with tilting lens board... and for use with wide-angle lenses. Bed remains linked to focusing knobs.
- E FOLDING INFINITY STOPS.** Bring the front into exact calibration with Vernier focusing scale and squared with film plane. Stops fold back, allowing front to move farther forward. Additional sets of stops can be installed for use with different lenses.
- F BODY SHUTTER RELEASE.** Set right in the camera body for extra stability at the instant of exposure. (F.I.) Speed Graphic has selector control, too, for instant

...takes every challenge
your skill can give it!

Speed Graphic or Crown Graphic... whichever famous Pacemaker Graphic you choose... you'll find that there's no challenge it won't respond to, no problem it can't resolve with first class results! This amazing versatility, plus a Pacemaker's ease and speed of operation... has made it America's most popular all-purpose camera with press photographers and amateurs alike. *Speed Graphic* (illustrated) has focal plane shutter with governed speeds to 1/1000th. *Crown Graphic* is identical, but without focal plane shutter... and costs less. Here are a few of the prize-winning features... but, of course, you must actually *handle* a Pacemaker Graphic to get a full appreciation of what a great camera it really is!

New Low Prices from \$174.15.

choice of shutters operable by the same release.

MULTIPLE FOCUSING CHOICE.

Use one, or use them together, they guarantee razor-sharp focus! **G** The accurate Vernier type focusing scale on camera bed... **H** Ground glass focus through the lens... and the coupled Kalart rangefinder (optional).

- J MULTIPLE VIEWING CHOICE.** Folding open frame viewfinder with parallax correction... **K** Tubular optical viewfinder with parallax correction and the ground glass screen.

L BUILT-IN FLASH SYNCHRONIZATION.

M GRAFLOK BACK. Designed to take such valuable accessories as 120 Roll Holder, Graflarger and Grafmatic Film Holder. (see next page)

N DIRECT READING FOCAL PLANE SHUTTER SPEEDS. No tables to consult. No calculations.

O GOVERNOR SELECTOR. Doubles or halves exposure with flick of finger. Insures optimum accuracy of shutter.

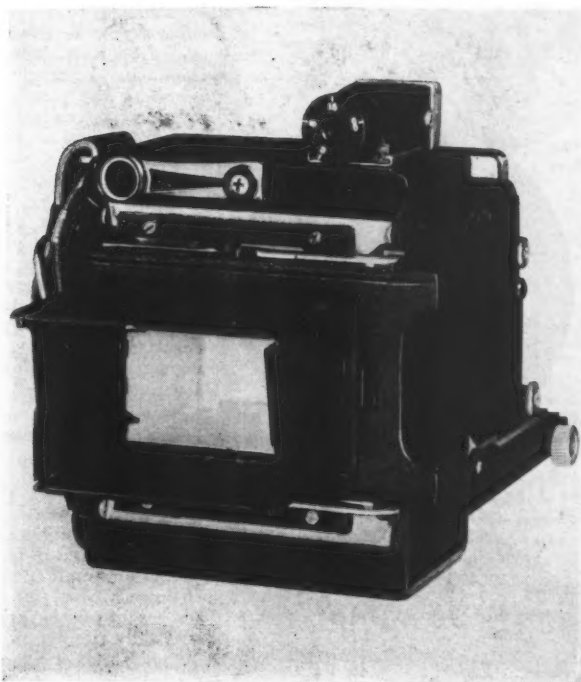
GRAFLEX®

Prize-Winning Cameras

GROWS WITH YOUR SKILL!

...backed by all these versatile accessories!

In the back of your Pacemaker Graphic, you'll find many of the reasons for its ability to cope with virtually any photographic problem... from sports to studio work... from landscapes to scientific and industrial picture-making! It's the famous GRAFLOK BACK of course...the back that allows your Graphic to grow to fit your own particular skill. Now standard equipment on all Graphics, the Graflok Back can be bought separately (from \$13.95) and be fitted to earlier models. Among its many other advantages, Graflok gives you a greater flexibility and choice of film than ever before...and below are some of the versatile accessories it accepts. The Graflok Back comes in all sizes of Pacemaker Graphics, of course!



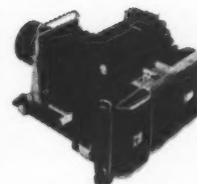
TAKES ROLL FILM.

This ingenious film holder converts your Graphic quickly to 120 Roll Film. Compact, lightweight, with automatic film control and counter. Dark slide permits removal from camera at any time! NOW ONLY \$18.95 up.



TAKES SHEET FILM.

Revolutionary New Rite-way Holder is far stronger than wood, less vulnerable than metal and *cannot* warp! For 4x5 Graphics... it's easier to use... guarantees perfect over-all picture sharpness. At \$4.05, it's an unmatched value!



TAKES PICTURES IN A MINUTE.

The Polaroid Land Back brings new versatility to your 4x5 Graphic, with its miracle picture-in-a-minute feature! Ideal for checking composition... and for any occasion where an immediate print is needed. \$77.50.



TAKES SEQUENCE SHOTS.

The unique Grafmatic (from \$14.85) holds six sheets of monochrome or color film or both! Cycles rapidly, permits quick changing and mixing of emulsions. See the famous Graflex Film Pack Adapter too! (from \$6.85).



MAKES ENLARGEMENTS.

Graflarger with Aristo Cold Light attaches to any Graphic or Graflex to make a home or portable enlarger. Doubles as retouching stand or transparency viewer. Underwriters' Laboratories approved. NOW ONLY \$35.00.

Have you read GRAPHIC-GRAFLEX PHOTOGRAPHY?

... the comprehensive book on prize-winning photography. Chapters by many famous authorities are illustrated copiously with photographs and diagrams. Edited by Morgan and Lester. New, revised Ninth Edition just out. \$5.00

FREE!
48 page booklet
tells you how
to buy a modern
camera!

Graflex Inc., Dept. 14A
Rochester 8, New York
Please send me the new FREE
GRAFLEX 48 page booklet.

Name _____
Street _____
City _____
County or Zone _____ State _____



Close-up Attachment

Lens Ring, Sunshade

perfect Christmas!

Nikon will make your Christmas photographically perfect. Flash attachments, close-up attachments, view finders (mechanical or optical), "Zoom" finders, sports view finders, fitted carrying cases, lens rings, sunshades... these are just a few of the Nikon accessories that will enhance the perfection of your Nikon Camera!

Order from your dealer now!

Fitted Carrying Cases

nikon

Camera Co., Inc.
25 California Street
San Francisco, Calif.

What's Ahead?

by Lloyd E. Varden

SINGLE-POWDER DEVELOPERS

It wasn't so many years ago that the amateur photographer frowned upon ready-mixed developers. His darkroom shelves were stocked with an array of chemicals, standing ready for compounding the pet developers of foremost workers as fast as they were published. The use of M-Q tubes marked an amateur as a rank beginner who had yet to learn the secrets of photographic chemistry. Camera clubs scheduled at least one lecture a year on some aspect of preparing developers. Manufacturers' instruction sheets carried several formulas with the usual precautions to be observed in mixing the components, and when results were unsatisfactory one of the first questions asked was "How did you mix the developer?"

Twenty Years Make A Difference

During the past twenty years a not-so-gradual change has taken place in photographic practice. Even professional photographers now use prepared developers, and it is a rare exception to find an amateur who clings to bulk chemicals. One often hears that a lot of the fun of photography was lost when amateurs adopted prepared chemicals, but such statements have to come from the "old timers" because the latest crop of amateurs have never known anything but canned developers.

Single Powder Developers

About the closest that a new amateur photographer comes to preparing a developer in the style of the old tradition is mixing the two—or sometimes three—parts of a prepared developer in the proper order. With liquid developers he foregoes the hazards of doing anything wrong, except in taking the solution temperature. But that takes

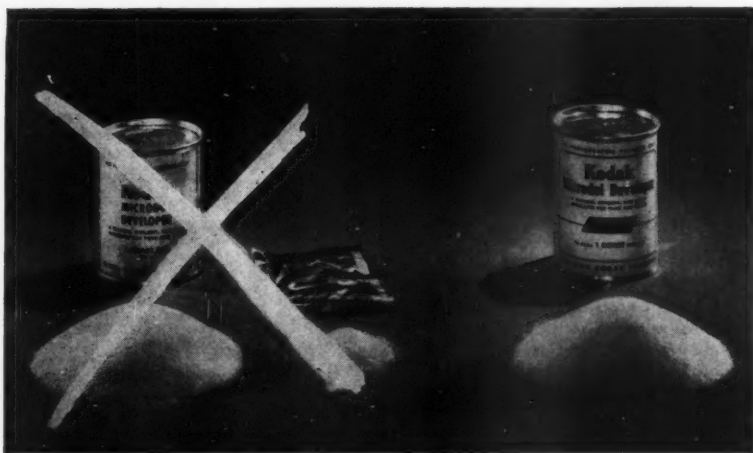
us into "physics", and I want to stick to photographic "chemistry".

In U. S. Patent 2,384,592, assigned to the Eastman Kodak Company, a means was disclosed by which the division of the developer components into two or more parts could be eliminated. It had been found that all of the chemicals necessary for certain types of developers could be put together if the mixture contained a stabilizing compound such as phthalic anhydride. To prepare a developer solution, then, all that the photographer had to do was measure the required amount of water and dissolve the entire contents of a single package. That's easier than making biscuits with Bisquick. If this trend continued it's going to get harder and harder to sneer at the housewife as an uninformed kitchen chemist.

There was some hope that photographers would not lose all of their chemical dignity when phthalic anhydride proved to have certain shortcomings in preparing single powder developers. It was not too successful, for example, when used with sodium metaborate (Kodalk) as the developer alkali. Moreover, it has the further disadvantage of not being very freely soluble in water, whereas it is well known that modern photographers consider anything beyond three or four motions of a stirring rod impractical in preparing developer solutions. The mood of the picture may be lost by changes in the latent image unless the developer can be readied without delay.

Recent Improvements

Single powder developers prepared with phthalic anhydride cannot contain benzotriazole as the restrainer or anti-fogging agent. This limits its applicability still further. But its most serious



America's Favorite
COLOR PRINT
CHINACOLOR
FINISHED LIKE FINE PORCELAIN

WALLET SIZE
2 1/4 x 3 1/4 **Now 25¢**

DELUXE MOUNTINGS
3X4 --- .65 4X5 --- .90
3 1/2 X 4 1/2 --- .75 5X7 --- \$1.75
CLASSIC 8X10 --- \$3.00

UNMOUNTED
2 1/2 X 3 1/4 --- .25 4X5 --- .75
2 1/2 X 2 1/4 (From Sq. Roll Film) --- .25
3X4 --- .55 5X7 --- \$1.50
3 1/2 X 4 1/2 --- .65 8X10 --- \$2.75

ANSKO COLOR FILM DEVELOPED
35MM (slide mid.) 120-620 - \$1.00

DUPLICATE COLOR SLIDES FROM 35 MM ORIGINALS \$5¢

NORMAL 3 DAY SERVICE
MINIMUM ORDER \$1.00

PLEASE SEND YOUR PAYMENT WITH ORDER

CHINACOLOR LABORATORIES
* "CHINACOLOR" is a Reg. Trade Mark
Dept. 31 B, Box 4203—Washington 12, D. C.

Professional Enlarging
Projection done by experts, no charge for cropping

ROLL FILM

Jumbo in Booklets or contacts	35mm Fine Grain
8 exp. \$4.00	3 1/4 X 4 1/2
12 exp. \$5.50	20 exp. \$1.00
16 exp. \$7.00	36 exp. \$1.50

Send for price lists and mailing bag.
Dealer inquiries invited

PROJECTION PHOTO CO. Dept. M
P.O. Box 658, Stamford, Conn.

How to DEVELOP, PRINT and ENLARGE Your Own Pictures

develop, print and enlarge your own pictures

Just Published!

This different kind of photography book lets you watch an expert at work. In it over 300 action photos show you every step in developing, printing, and enlarging your own pictures. Brief, clear explanations tell you about equipment and materials, offer you smooth-working darkroom methods, and show you how anyone can increase the enjoyment of his hobby while saving quite a bit of money besides.

The writing is crisp and to the point—it tells you exactly what to do. The pictures show you how to do it. . . . You learn how to develop all kinds of black-and-white film, how to make low-cost contact prints, enlargements, and how to put professional sparkle in pictures through the use of projection controls. Send remittance with order to

By **JACK O. FLYNN**
ALAN KELLOCK
ALBERT J. ROSENBERG

Handy spiral binding, large 7 x 10 pages
303 illustrations,
\$3.75
(Add 3% sales tax with orders for N. Y. C. delivery)

Modern Photography Book Store
251 4th Ave. New York 10, N. Y.

drawback is that under certain temperature conditions it may react in mixtures containing sodium carbonate and sodium sulfite to form a gas. Sufficient pressure can be generated by the gas within an hermetically sealed can to cause the enclosed powders to be ejected with violence when the can is opened.

Solving the Problem

In U.S. Patent 2,606,118, assigned to the Eastman Kodak Company by Mr. William J. Rogers, the advantages of boric anhydride (boron oxide) for single powder developers are elicited. Mr. Rogers has found that boric anhydride overcomes the objectionable characteristics of phthalic anhydride. It is less acid and does not react as easily or as violently as phthalic anhydride with sodium carbonate and sulfite. It is odorless, practically colorless, stable and free from deleterious photographic action. It can be used with metol, hydroquinone, pyro, catechol, glycin, and other developing agents. Sodium metaborate can be used as the developer alkali as well as monohydrated sodium carbonate. Samples of various developer compositions containing boric anhydride as the stabilizer were stored at 120 F for prolonged periods in hermetically sealed cans without difficulty. The properties of the developer went unimpaired and there was no expansion of the can from gas pressure as with phthalic anhydride.

It seems that the photographer of the future will have to be content with just making pictures, without knowing what goes into a developer.

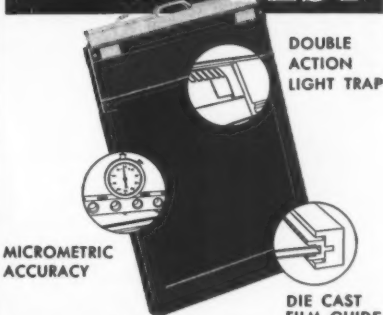
What We Ought To Know

This leads us to the general problem of just what a photographer should know. In a recent issue of the British Journal of Photography (Oct. 10, 1952) this subject is discussed anonymously under the title "What We Ought To Know". The article points up a trend in England that parallels a trend observed by many of us here in America. The 1952 examinations in photography taken by students at the London Institute, Department of Technology of the City and Guilds, indicated a lessened ability to put on paper the essentials of the photographic process. Only 53.6 per cent of the students managed a passing grade, as compared to 60.5 per cent in 1951, and 73.4 per cent in 1950. The practical work submitted by the students was much better than the paper work.

It would be interesting to have the expressions of readers on the question of how much a photographer should know. The prevailing opinion of today's photographers will determine to a very great extent "what's ahead" in the way of training for photographers of tomorrow.—THE END.

Editor's note: Readers answering Mr. Varden's question, please address What's Ahead? MODERN PHOTOGRAPHY, 251 Fourth Ave., New York 10, N.Y.

LISCO Holders do it BEST



Lisco cut film holders are designed for ONE purpose only—to hold sheets of film so that the best pictures result.

Surpassing drop tests, accuracy checks, temperature, humidity, and rigidity controls. All the tests to which other holders are seldom if ever submitted, are an accepted part of the rigid specifications to which Lisco holders are made. The plain fact is—Lisco holders are specifically designed to meet best the only crucial test—the quality of the finished print.

2 1/4 x 3 1/4 — \$3.85 4 x 5 — \$4.12
3 1/4 x 4 1/4 — \$3.99 5 x 7 — \$4.71

Fully Guaranteed for your complete protection.

Sold at leading camera stores everywhere.

Write for FREE literature.

LISCO PRODUCTS CO.

631 West Elk Avenue, Glendale, California

ALBINAR
f:4.5 135mm
Made in West Germany
LIST \$59.95

For Kine Exakta, Praktika, Contax-S cameras. The Only Lens of its Kind . . . as a Telephoto with 35mm . . . as a Portrait Lens with 2 1/2 x 3 1/4 cameras . . . as an Enlarging Lens. Precision-made, fully coated, A-a-l-e-m-e-n-t construction. At Your Dealer or write for FREE folder. A & S Camera Supply Co., Inc. 1123 Bway, N.Y.C. 10

BE A NEGATIVE RETOUCHER

MAKE BIG MONEY! UP TO \$50 AN HOUR SPARE OR FULL TIME

Amazing new proven visual instruction by foremost Hollywood photographic authority, quickly and easily prepares you to do finest professional negative retouching at home. We supply all equipment needed—step by step directions for building big profit business from photo studios everywhere. No special ability or experience needed. Men and women of all ages can make tremendous profits. THOUSANDS OF SATISFIED STUDENTS.

SEND FOR FREE BROOKLYN TODAY

THE DUVAL SCHOOL Dept. WY, HOLLYWOOD 40, CALIF.

REMEMBER—AMONG FINER 35 MM CAMERAS, BOLSEY GIVES YOU MORE FEATURES THAN ANY OTHER CAMERA IN ITS PRICE RANGE!

FREE CATALOG, EXPOSURE GUIDE, WRITE BOLSEY CORP. OF AMERICA, 110 E. 35 ST., N.Y. 10

Photographers!

WIN \$100*
for "CAT PICTURE of the YEAR"

WIN \$25*
for "CAT PICTURE of the MONTH"

*U.S. Govt. Series E Bond

Contest sponsored by
CATS MAGAZINE and the makers of 3 LITTLE KITTENS All-Fish CAT FOOD

Cat Picture Contest, P.O. Box 403, Boston 2, Mass.

☐ Entry attached ☐ Send me contest rules

Name _____ MP

Address _____

City _____ State _____

SAVE UP TO 60% ON PALLEY'S BARGAINS

RICOH FLEX VI — A GIFT FOR THE WHOLE FAMILY!



Acclaimed as "The Buy of the Year" by a nationally famous research publication. It's an ideal 'family' camera for indoor or outdoor use. Simple to load and operate. Comes with a genuine leather, ever-ready case.

Only 3850

All ITEMS 10 DAY FREE TRIAL MONEY BACK GUARANTEE

Compare These Features with those of Cameras Selling for Twice As Much...

- *All Metal Body, Leather Covered.
- *ASA synchronized shutter.
- *Speeds 1/25, 1/30, 1/100 & 8.
- *Built-in focus magnifier.
- *Depth of field scale.
- *Comes with genuine leather Case.
- *Twin, Matched, Color Corrected, Coated Lenses.
- *Short cocking, single lever shutter action.
- *Built-in Flash Synchronizer.
- *Precision Coupled Focusing.
- *Takes 8 & W or Full Color.
- *Uses No. 120 film. 12 exp.

GOV'T SURPLUS 16mm CAMERA

That famous 'Gun Camera' used by Navy & U.S.A.F. Electrically operated. Ideal GIFT for amateur or the professional movie maker. Has a 1-3/8" (35mm) lens with built-in exposure guide & shade. Adjustable for THREE SHUTTER SPEEDS—16, 32, & 64 frames per sec. Uses regular Eastman magazines (50 ft.). Comes complete with ZOOM viewfinder and battery box. Requires no winding—operates on 24 volt current supplied by ordinary dry cell batteries carried in box that clips on to belt. Takes Black & White or Full Color. This is a COMPLETE UNIT except for film and batteries.

CONVERTED MODEL—Rebuilt with special adapter which fits any STANDARD 16mm Movie Lens. Makes the above camera one of the finest of its type on the market. Available with or without lens but comes with "C" mount adapter.

FILM (50 ft.) B&W—\$3.00 Set of Batteries \$1.79

FERRANIA RONDINE

FLASH CAMERA 1375 CASE 299

Made by Italy's finest Camera Manufacturer. A handy box-type camera with built-in flash synchronization. Has a hard coated f:8.8 precision ground, 75mm lens in a precision focusing mount—adjustable close-up to inf. Shutter has 2 speeds: 1/75 sec. & Time. Has one optical & one sport view finder. Takes 8 exposures on a roll of standard 127 film—B&W or color. Metal body is leather covered in choice of 4 beautiful colors: Dk. Brown, Tan, Blue, Dk. Green. Handsome leather carrying case comes in same colors as above. (please state color choice.)

DARK ROOM PHONES

These desk type telephones provide perfect, two-way hookup between the darkroom and any point up to 100 ft. Each set includes 2 phones, wire and hookup instructions. Operates on flashlight batteries. Has blue enamel finish. Price per SET.

OUR LATEST CATALOG—OVER 230 ILLUSTRATIONS—Shows 1000's of items. Write for your copy today. Send 50c to cover cost of handling and mailing. Order from this ad. 50% deposit with C.O.D.'s. Prices F.O.B. Los Angeles, California.

PALLEY SUPPLY CO. Dept. MP-1
2263 E. Vernon Ave., Los Angeles 58, California

HEINIGER

(Continued from page 48)

I am forced to." The resulting picture had all the spontaneity that you might get by standing and waiting—if you are lucky. But with Heiniger's precision approach, the results are insured—unless the sun goes down. Page 16.

From lakes to jumping men pretty much sums up the range of Heiniger's subject matter, provided you include every conceivable subject in between, from people to bugs to animals to airplanes. And considering the fact that most of his work is done for money on assignment, the range of subjects, the lack of obvious commercialism, and the presence of a high level of artistic taste is all the more remarkable. Heiniger explains it this way: "No matter what kind of photography you want to do in Switzerland, you have to do it for commercial and industrial accounts if you want to make a living from your work. If you try to live by selling to photography magazines or others, you'll starve, because the best of them don't pay \$5 a picture to the best photographers." On the other hand, he points out that a top-flight commercial photographer has a fairly free hand in the kind of work he can turn in for a job, so a photographer with taste and artistic sense doesn't have to compromise on the quality of his work just because he's being paid to do it for an ad or a poster.

Swiss ads differ

An example of this kind of thing is a shot of a mother and child that Heiniger did a few years ago. It had the serene quality of a Renaissance madonna, and the faces of the pair were anything but the slick, happy faces that frequently appear in four colors in American ads. Page 45. But even this one was on an assignment—for a poster for the *Winterhilfe* (Switzerland's annual Christmas charity).

Even when Heiniger isn't trying to make any money, he sometimes does anyway. Back in 1937 he spent several months shooting around a horse ranch on the plains of Hungary. He came back with an armload of pictures and decided to make a book of them. Page 44. So he put them together, did a layout, wrote the text, and then tried to get it published. But picture books don't sell any better in Europe, he says, than they do here, so it was tough to convince anyone that it was worth the gamble. Finally, however, one brave publisher agreed to do it. The result was *Puszta Pferde* (roughly *Prairie Horse*) which came out toward the end of the year and to everyone's surprise sold phenomenally both during the 1937 Christmas season and ever since. To date more than 16,000

(Continued on page 96)

Become a PROFESSIONAL PHOTOGRAPHER

• You can learn photography best under top-notch teachers. Franklin Technical Institute's faculty are successful professionals. They teach you from the wealth of their own experience. Intensive one-year course in portrait, industrial, commercial photography.

YOU PRACTICE ON THE FINEST EQUIPMENT
Guided by these outstanding men you handle daily: Deardorf, Graphic and other cameras; latest enlargers; 2 to 24" Bausch & Lomb and other fine lenses; light meters, etc. You study cameras, lenses, films; lighting, composition; retouching, finishing, mounting. Also science courses, business law. Limited registration. Coeducational. High school or equivalent required. Write for free catalogue.



FRANKLIN TECHNICAL INSTITUTE
Founded by bequest of Benjamin Franklin
40 Berkeley Street, Boston 16, Mass.

TOUGH DEVELOPING PROBLEMS SOLVED!

Try 777 once... you'll never use another brand. No matter how complex the job, how big the enlargement... get consistent fine grain results no matter what the season. Temperature range from 60 to 90 F.

Write for FREE booklet.
Since 1938 America's Most Dependable Finegrain Developer

777 PANTHERMIC

HARVEY PHOTOCHEMICALS, INC. NEWTON, NEW JERSEY, U.S.A.

AMERICA'S TWO BEST BUYS

SUN RAY ENLARGERS
AVAILABLE AT ALL PHOTO DEALERS

DEFENSE BOND U.S. DEFENSE BONDS
AVAILABLE AT ALL BANKS AND POST OFFICES

SUN RAY PHOTO CO. Inc., 301 Lafayette St., N. Y. C.



GROUND GLASS

There is no parallax problem because the lens that views the picture is the lens that takes the picture. The viewing mirror lifts automatically out of the way when the shutter is snapped.

2 REASONS

Just two reasons why the 35mm Single Lens Reflex Camera has become first choice among professionals and amateurs alike:

REASON #1 You SEE what you GET...

You actually compose the picture on the groundglass of your single lens reflex camera.

You see an exact preview of the picture before you take it. No guesswork, no wasted film, no disappointing pictures.

REASON #2 You GET what you SEE...

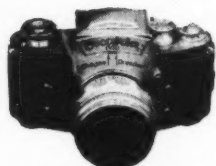
Total absence of parallax (this means: no more cut-off heads!)

You will always have on your film exactly what your finder shows, even when you use extreme telephoto or wide angle lenses.

Your focusing is done directly on the greatly enlarged groundglass image.

The RESULT:-

Your picture will be well composed, accurately centered and needle sharp.



35mm Exakta VX

Queen of the single lens reflex cameras. Interchangeable eyelevel and waistlevel focusing systems, 29 shutter speeds, delayed action, flash and strobe synchronization.

with F3.5 Tessar, preset, \$24.95 down, Cash \$249.50
with F2.8 Tessar, preset, \$26.95 down, Cash \$269.50
with F2 Biotar, preset, \$34.30 down, Cash \$343.00
deLuxe Leather Case \$12.00 PentaPrism \$50.00



35mm Exa

Made by the makers of the Exakta VX. Has the basic features of the Exakta VX, including twin flash and strobe synchronizers, interchangeable focusing systems.

The ideal camera where the versatility of the "big" Exakta VX is not needed. Wonderfully compact, ideal in size for milady.

with Meritar F2.9 \$9.00 down, or Cash \$89.75
with Tessar F3.5 \$12.00 down, or Cash \$119.75
Carrying Case \$9.95.



35mm Praktica FX

Ruggedly constructed favorite in Industry and Research.

Strobe and flash synchronization. Slow speeds to 1/2 second, fast speeds to 1/500 sec.

with Prakticar F2.9 \$9.95 down, or Cash \$99.50
with Tessar F3.5* \$13.95 down, or Cash \$139.50
with Biotar F2 \$19.95 down, or Cash \$199.50
*Pre-set. Case \$10.95

A word about Seymour's . . .

Did you know that we handle single lens reflex cameras EXCLUSIVELY? We are so convinced that the single lens reflex principle is head-and-shoulders above any other system that we just don't handle other cameras. We are specialists in the single lens reflex field. May we help you solve your photographic problems?

. . . and a word to owners of single lens reflex cameras:

As single lens reflex specialists we carry the largest variety of accessories for your camera. Be sure to get on our mailing list. Make Seymour's your source of supply for your photographic needs and be sure to obtain correctly fitting accessories, always. Before you forget it: Send us your name today.

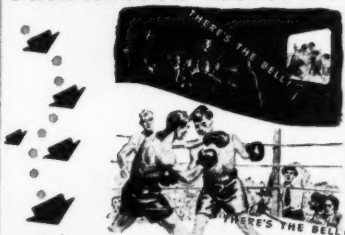
Let's get acquainted! Write today!

Mail Orders promptly filled.

Seymour's, 354-B West 31st Street, New York 1, N. Y.
WI 7-0453

Seymour's
THE SINGLE LENS REFLEX SPECIALISTS

Guaranteed Results!



Shoot 16mm talking pictures with the "Cine-Voice" Sound-On-Film Camera... \$695.00 with money-back guarantee. Write for free illustrated folder.

BERNDT-BACH, Inc.

7389 Beverly Blvd., Los Angeles 36, Calif.

16mm SOUND-ON-FILM EQUIPMENT SINCE 1931

CASH FOR CAMERAS!

Write today giving full details about your camera and get our "above Blue Book" cash offer or trade-in allowance.

FREE CATALOG

Ask for Catalog "M"



G. I. OVERSEAS ORDERS GET 24-HR. ATTENTION

ALFRED

We buy—sell and trade cameras

BASS INC.

585 MARKET ST. - SAN FRANCISCO



See... Use... the New One-Piece Camera Support!

Da-Lite® Unipod CAMERA SUPPORT

The versatile UNIPOD has no parts to lose, add or replace. It is amazingly compact and lightweight—actually weighs less than most cameras. The UNIPOD is simple to manipulate—just twist the top knob and a threaded element pops up, onto which any standard still or movie camera fits securely. This handy new camera support extends from 35" to 60" and may be used anywhere... home, sporting events, on even the roughest terrain. See the new Da-Lite UNIPOD at better photo stores everywhere. **\$6.50**

UNIPOD knob showing extended threaded element for attaching camera.



DA-LITE SCREEN CO.
2729 N. Pulaski Road, Chicago 39, Ill.

Please rush me FREE... more detailed information about your new UNIPOD Camera Support and White Magic Projection Screens.

Name _____

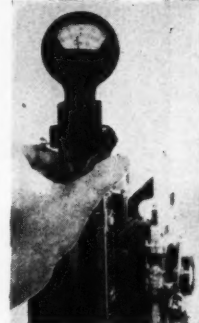
Address _____

City _____ Zone _____ State _____

free!

Detailed description, illustrations... all about the New UNIPOD!

MAIL THIS COUPON TODAY



Just Press the Button and the CVD Battery Tester*

checks your batteries right in the case.



ALWAYS BE SURE of your synchronized shutter camera batteries with this QUICK EASY TEST. * Pat. Pending.

CVD Company

516 Fuller Ave., Helena, Mont.

HEINIGER

(Continued from page 94)

copies have been sold, which—in a country of less than five million people—puts it in the bestseller class. Heiniger recently completed another book of his work, which he hopes to publish in the United States.

Practically all of Heiniger's movie work has been commercial too. His No. 1 client for films is the Swiss telephone company. He has done films for them showing the laying of a phone cable over the Alps, another on the manufacture of a cable, several on the uses of the phone. These last consist of groups of short takes showing the various uses of the telephone in terms of human beings isolated on farms or in the mountains. Nobody in this country would question the fact that the phone is a handy gadget to have around for calling the doctor or talking to a friend, but in the mountains



Taken with floods in studio. Heiniger used 4x5 Linhof, f/6.8 Goerz Dagor lens. Exposure: 4 sec., f/36, Super-XX.

of Switzerland that kind of thing isn't taken for granted, and Heiniger says these films were well received by Swiss audiences.

Favorite equipment

Heiniger's favorite camera is his 9x12 cm. Linhof with f/6.8 Goerz Dagor lens. But when he hasn't the time or the light to use it, he resorts to an Automatic Rolleiflex with an f/3.5 Tessar. He prefers the Linhof because he feels the shorter focal length of the Tessar combined with the smaller negative size costs him too much in loss of depth and increased grain. For most work he would rather use Kodak Plus-X than Super-XX because of its finer grain, but again, when he's working under adverse lighting conditions, he turns to Super-XX. He says

(Continued on page 100)

TRAVELLING COMPANION

Rollei



Whether winter travels take you north, south, or in-between, your best photo companion is a Rollei. Versatile, quick-in-action, sharp cutting, and with unequalled operating simplicity, Rollei makes you master of every scene . . . gives you superb pictures in the preferred $2\frac{1}{4}'' \times 2\frac{1}{4}''$ size. But for inexpensive color, you simply insert the special Rolleikin II Adaptor, and shoot with 35 mm film. Visit your local dealer today and examine both the Rolleiflex and Rolleicord . . . the world's simplest, most versatile and dependable cameras.

BURLEIGH BROOKS COMPANY

10 West 46th Street, New York 36, N. Y.

— P O N D E R & B E S T , I N C . —

In the Western States, Alaska & Hawaii—814 N. Cole Ave., Hollywood 38, California

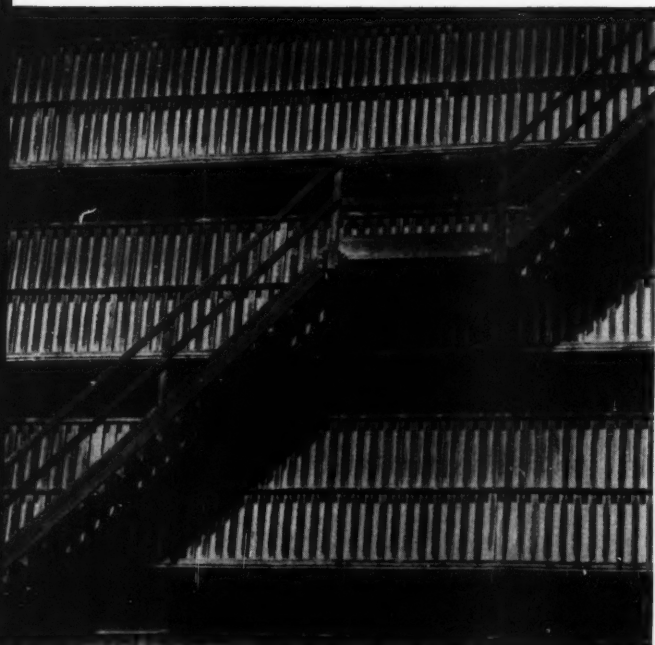


THIRD PRIZE \$10. How does a model feel after a long color session? Charles T. Patten of Wallingford, Conn., came up with this black-and-white answer taken on a 9 x 12cm Recomar camera at f/16, with No. 22 bulb and open flash.



THIRD PRIZE \$10. Fury DeVito of Woodside, N. Y., got permission to use his Speed Graphic inside the circus oval, then shot with Press 40 bulb at a distance which wouldn't disturb the performers. Exposure was 1/100 sec., f/5.6.

"I tried it myself"



ROUND the year picture-taking can be a lot of fun if you take advantage of the changing seasons. With or without snow, winter brings a flock of new activities which make fine picture material. Why not take advantage of this? You'll still have time for flash and flood shots, as well as the darkroom work you didn't do last summer.

Though we can't make use of color in this monthly contest, you may submit as many black-and-white prints as you wish. What's more, they can be of any size, and on any kind of paper. There are only a few rules: Put your name, address, and all photo data on the back of each print. This should include the kind of camera used, speed, f/stop, type of film, plus full lighting details. If the shot presented any particular shooting problems, tell us about them, too. Remember to include postage if you want pictures we cannot use returned. All contributions are considered for use elsewhere in the magazine. Send your contest pictures to: Columns Editor, MODERN PHOTOGRAPHY, 251 Fourth Ave., New York 10, N. Y.

THIRD PRIZE \$10. While wandering through Culver City, Calif., on a hot Sunday afternoon, Dr. Arthur L. Sokoloff of Los Angeles saw this pattern. He set his Rollei at 1/100 and f/8; then exposed on Super-XX film with yellow filter.

**MODERN
PHOTOGRAPHY'S
MONTHLY CONTEST**

**FIRST PRIZE \$25
SECOND PRIZE \$15
THIRD PRIZES \$10**

\$25 FIRST PRIZE. A broken window gave Steve Manville of Brooklyn, N. Y., a novel setting for this informal portrait of his wife. Manville exposed at 1/200 second and f/5 on Plus-X film, with Medalist I. The print was on Varigam. ▷

SECOND PRIZE \$15, goes to Minoru Uchida of Fukuoka, Japan, who captured the liquid quality of water in this shot and enhanced it by using a long narrow format. Camera was a Japanese Minoltaflex. Exposure was 1/250 sec., and f/8, with Japanese Neopan film. ▽



PRICED FOR
XMAS BUDGETS!

an F/3.5 Twin Lens Focusing Reflex for \$39⁹⁵



THE *Reflekta*

2 1/4 x 2 1/4

Look anywhere . . . go anywhere—there simply isn't a camera in the whole wide world that compares in solid value with the German-made Reflekta! You get 12 album-size 2 1/4 x 2 1/4 exposures on 120 film. The fast, hard-coated F/3.5 Meritar lens is coupled with a coated F/3.5 focusing lens in a helical mount. You compose and focus directly on the ground glass . . . see the picture in its exact size, just as it will be recorded on the film. You get built-in flash synchronization . . . a 4-speed shutter . . . a handsome all-metal body. Yes—color . . . black and white . . . superb enlargements . . . night and indoor photography—everything is at your fingertips with the Reflekta. And at the lowest price in history for a camera of this quality!

Price fair traded, fed. tax. incl.

BUILT IN
FLASH



TRUE
REFLEX
FOCUSING



See the new REFLEKTA II—World's finest reflex under \$100

ERCONA CAMERA CORP. 527 Fifth Ave. • N. Y. 17, N. Y.

FOR *better* PICTURES *all year long* GIVE *Heiland* FLASH

For taking better flash pictures easier there is nothing finer than Heiland—the most complete line of quality flash equipment in the world. Choose from economical units for cameras with built-in flash—from famous press synchronizers—and from the most efficient portable electronic flash units made.

Ask your Heiland dealer to show you why Heiland is used by over ¾ of all major U. S. newspapers!

WRITE FOR FREE CATALOG



HEINIGER

(Continued from page 96)

that despite the rated speeds of the two, he doesn't think Super-XX is quite two times as fast as Plus-X. He has found that under normal lighting conditions outdoors in Switzerland, if the right exposure on Plus-X is 1/75 sec., it should be around 1/100 sec. for Super-XX.

In addition to the Linhof and the Rolleiflex, Heiniger also owns an ancient German wooden 5x7 view camera which he rarely takes out of his studio. For certain types of work in the studio he prefers it to his Linhof, but even then he uses an adaptor so that it will take 9x12 cm. film.

Ordinarily, Heiniger prefers to shoot outdoors whenever possible, using natural lighting plus aluminum or white reflectors. This is principally because such light costs less, but also because he likes the quality of daylight better than that of floods or spots. However, in Zürich where the weather usually is dismal in the fall and winter, it's almost impossible to depend on any kind of decent weather lasting long enough to make a set-up and shoot. Then, he's forced indoors, where he makes use of floods, spots, plus any daylight that may be available, but practically never flash. He says he would like to use electronic flash, but the units available thus far in Switzerland haven't been too good. He figures when he gets to America this spring, he'll be able to get an up-to-date electronic flash unit.

Heiniger doesn't do much darkroom work himself any more, although he says that at one time he did it all and can do anything his lab assistant can do. His general practice is to give his darkroom girl his negatives along with any special handling instructions. She develops the film and makes a set of straight prints. Then Heiniger takes a look at them and decides what kind of cropping or dodging she should do on the final set.

He uses D-76

His standard film developer now is D-76 although he has used others during his career, including DK-20. He says that if properly handled, D-76 gives him as fine a grain in his negatives as anything else will. All his darkroom solutions are used at 65°F. and he permits no variation unless it is necessary to get some special effect in a negative. For prints, Heiniger doesn't use any standard developer. Through a rather strange process he has come up with his own formula. After trying practically every paper developer on the market he decided that an average one in between all of them would be best. So he got the formulas of all the available prepared developers and took the average amount of each

(Continued on page 102)

Fabricating "KNOW-HOW"

makes the Big Difference!



CALUMET
Stainless Steel
Temperature
Regulating Sink

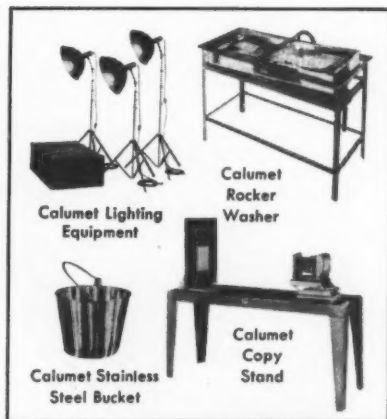
CALUMET Stainless Steel Sinks give you these extra values

- Fabricated with the proper kind of stainless steel
- Proper kind of finish
- Proper forming and welding
- Proper sizes to handle stock photographic materials
- Rigid, welded frame
- Easy to clean, easy to install
- Leveling screws for easy adjustment
- Leakproof, will not react with your chemicals
- Removable standpipe for water level control

Designed and built with your needs in mind

"Designed and built with *your* needs in mind" is no idle claim with Calumet. It's a fact. CALUMET Stainless Steel Sinks are a universal type line of sinks that can be used either in the printing room or in the developing room. Trays, tanks and washers can be arranged and rearranged to fit any production need.

Remember, only *Stainless Steel* gives you lifetime service with minimum maintenance. And only CALUMET gives you stainless steel equipment that's fabricated especially for your photographic needs.



Calumet Lighting
Equipment

Calumet
Rocker
Washer

Calumet Stainless
Steel Bucket

Calumet
Copy
Stand

Send for illustrated catalog showing the complete line of CALUMET equipment



Calumet Manufacturing Company

DEPT. C. 2326 SOUTH MICHIGAN AVENUE • CHICAGO 16, ILLINOIS



Get better pictures with your projector
through **SOMCO Projection Lenses**

Designed to fit
most 8mm and
16mm Projectors

Natco
MOVIE-MITE
Vetee
AMPRO
Keystone
HOLMES

Bring out the
Best in every film
through
SOMCO Lenses

When all is considered, the success of
your movies depends largely upon the quality of
your projection lens. Don't be satisfied with anything but
top results from your projector. Be sure you are getting as
much out of your films as you put into them. Send for illustrated
folder showing the SOMCO line of 8mm and 16mm Cine Projection
Lenses, and 35mm Slide Projection Lenses.

Somco

Simpson Optical MANUFACTURING COMPANY
3200 West Carroll Avenue, Chicago 24, Ill.

STUDY PHOTOGRAPHY
COMMERCIAL • PORTRAIT • ILLUSTRATIVE
Finest professional instruction and equipment. Co-
educational. Training under G.I. Bill available.
Entrance dates Jan. 5 and Feb. 2. WRITE OFFICE
OF REGISTRAR, ROOM 152.

RAY-VOGUE
750 North Michigan Ave., Chicago 11

35MM ANSCO COLOR

Daylight or Tungsten
20 exp. reloaded in metal cart.

3 for \$3.50 • 6 for \$6.50

Please include postage. Include 25% on C.O.D.
shipment. Write for new catalog today.

SUPREME PHOTO SUPPLY Co. Dept. M.
11 Broadway, New York 4, N. Y.

HEINIGER

(Continued from page 100)

ingredient going into them and uses it as the proper amount for his own formula. As a result he has what you might call a cross-section of all the print developers made, and he says it works fine.

Practically all of his prints are made of Kodabromide paper with one of three Kodak commercial enlargers. For his mural prints which he makes on his studio wall, he uses a special king-sized job built in Germany. Unlike many big-time American commercial photographers, Heiniger has a relatively small staff—only three people: a darkroom worker, a receptionist-bookkeeper, and a studio assistant. That means that he does most of the actual photographic work himself instead of merely directing the operations of a dozen or more people. It keeps the overhead down, he says, and it allows him to maintain a closer supervision of the quality and precision of everything that comes out of his studio.

But now he is leaving it all behind him because he's afraid he has had it all a little too easy and thinks he ought to find new photographic worlds to conquer before he grows old and stale. That's the real reason he is selling out his Swiss operation and coming to this country.

It will be interesting to see what America looks like through Heiniger's precise camera-eye. —THE END

DR. CINEMA

(Continued from page 79)

brilliant light required for good color projection. In addition to being dirty, the projector lens was an old one having an aperture too small to pass sufficient light for proper illumination. Moreover my friend was using this small-aperture lens and weak lamp to throw the image much too far. He'd have been better off accepting a smaller image, with the screen closer to the lens. The screen itself was an heirloom of some sort which had long since lost an appreciable portion of its reflective quality. To top things off, some illumination from a lamp in the hall was reaching the screen, thereby killing a certain amount of the screen image's brilliancy.

I went home and brought back my own projector and screen, turned off the hall light, and showed my friend that his films had very satisfactory color characteristics when given any kind of a break during projection.

Correct projection of color films requires a darkened room, a good lens, a bright projection lamp, and no more than a reasonable lens-to-screen distance. When one or more of these factors is below par, you must expect below par color rendition when your films are projected.—THE END

INTRODUCTORY COUPON OFFER

8mm
16mm **COLOR MOVIE FILM**

Now! A brand-new FULL-COLOR movie film at prices you can afford... backed by SOLAR'S more than 15 years experience in the home movie film field. Available in standard types and speeds... Outdoor (for daylight) and indoor (for artificial light).

COUPON

DOUBLE 8mm SPOOL with coupon (Reg. Price \$3.29) **\$249**

16mm MAGAZINE with coupon (Reg. Price \$5.49) **\$398**

16mm 100 ft. SPOOL with coupon (Reg. Price \$8.59) **\$698**

LIMIT: 6 ROLLS (May be assorted) With Each Coupon!

Acclaimed by color experts everywhere! Now available for the first time for 35mm cameras 20 exposure cartridge with SOLAR'S famous fast processing service and beautifully mounted transparencies at ONE LOW PRICE!

NEW 35MM COLOR FILM

\$1.98

SPECIFY OUTDOOR OR INDOOR

20 EXPOSURE CARTRIDGE..... With Coupon (Reg. Price \$2.79)

LIMIT: 6 ROLLS (MAY BE ASSORTED) WITH EACH COUPON... OFFER EXPIRES FEBRUARY 1st, 1953... SO CLIP THIS COUPON AND ENCLOSE IT WITH YOUR ORDER AND REMITTANCE (no c.o.d.'s.) AND SEND IT BY MAIL NOW! FREE LITERATURE ON REQUEST! ASK ABOUT OUR NEW LOW COST CUSTOM TITLE SERVICE.

SOLAR CINE PRODUCTS, Inc. 4247 South Kedzie, Chicago 32, Ill.

INTRODUCTORY COUPON OFFER

COUPON

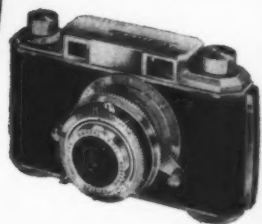
KONICA... proudest achievement of
New Japan! Here, the age-old tradition of
fine craftsmanship combines with
the farthest advances of Western science
to realize the photographic specialist's
most exacting demands. Now brought
within the novice's range is the thrilling
experience of owning precision
photographic instruments. The unsurpassed
sharpness of the Hexar and Hexanon lenses
have helped make these cameras
international favorites.



FINE CRAFTSMANSHIP A TRADITION



KONICA II



KONICA I



PEARL II

KONICA II

- Standard 36 exposures on 35mm cartridge
 - Extra large viewing-rangefinder window
 - Internal optically-coupled rangefinder
 - Synchro-Konirapid-S Flash shutter, 1 sec. to 1/500, B. & T.
 - Double exposure prevention (except where intended)
 - Body release - accidental exposure prevention
 - All controls visible from top
- With f:2.8 50mm Hexanon Coated Lens \$181.50*
Genuine Leather Case .. 8.00

KONICA I

Modification of Konica II, with many of its outstanding features. With f:2.8 Lens, \$117.00*; f:3.5 Lens, \$104.50*

PEARL II

Takes 16 pictures on 120 roll. Precision folding camera, compact as can be! With f:3.5 Lens \$122.75*; f:4.5 Lens \$103.25*

AT YOUR DEALER NOW!

Write for FREE CATALOG today!

Konica

KONICA CAMERA CO., Sole U.S. Representatives
78 West Chelten Avenue - Philadelphia 44, Pa.

**ONE PHOTOFLOOD is worth
\$10.00 IN FLASH LAMPS!**

**MAKE TRUE-TO-LIFE
PORTRAITS with
TRIANGLE LIGHTING**

FLOODLITE KIT

pleases any camera owner. Three lights with clamps and bulbs in compact carrying case make home portraits easy. Directions included

\$985
Incl. lamps



**LIGHT FOR ACTION
WITH THE NEW
EVER-READY
ARMLITE**

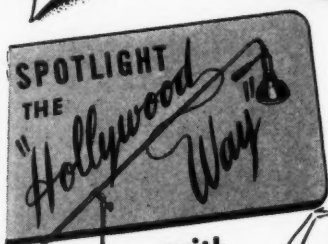
Brings advantages of photofloods to bar lighting—better light coverage, diffusion, economy, and safety. Ideal for color movies or stills. Complete with lamps and carrying case.

\$1295

**FINEST
IN
Lighting**

Victor

**GUARANTEED
IN
Quality**



**with
Miniboom**

Full range of control from handle.

\$995

Complete with stand. Lamp extra

**GET
PROFESSIONAL
RESULTS
WITH**



Model A16

Complete with Roller Base

SEND FOR FREE INFORMATIVE LIGHTING BOOKLET

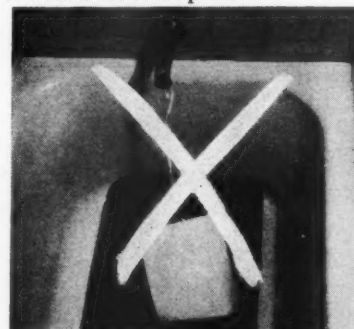
JAMES H. SMITH & SONS CORP. GRIFFITH INDIANA

ENLARGING, A TO Z

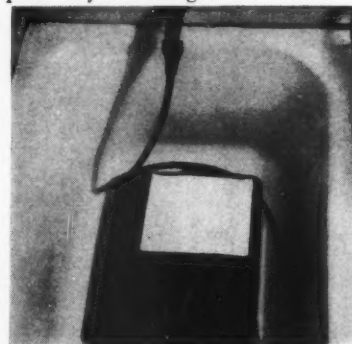
(Continued from page 59)



33. Hoist the print by one corner, let excess shortstop drain off for a few seconds. Drop the print into the hypo tray face up, agitate it there with the tongs for about 30 seconds. Check that all enlarging paper is safely stowed away and turn on the room light to see what you've accomplished. Leave the print in the hypo for 7-10 minutes, no longer. Excessive time in fresh hypo will bleach the image, get so much hypo into the paper fibres that it is difficult or impossible to wash it out of the print.



34. Proper and thorough washing is important to insure a long life for the print. For this the 11 x 14 tray is useful and the simplest place to put it is in the bathtub. Don't let a forceful stream of water hit the print directly *above*. Some rubber hose device like an inexpensive shower attachment *below*, can give a thorough but gentle washing action. Water should be kept within 65-80°F. range. If too cold, hypo won't be removed. If too hot, print may be damaged.



(Continued on page 106)

a *Leica*® for Christmas

... the most endearing,
most enduring
gift of all



With all your love, give all the life-long satisfaction, all the lasting pleasure and pride of ownership inherent in the very finest camera made. Give a *Leica* with one of its famed precision lenses that take the finest pictures in every kind of photography.

... Or, to warm the heart of any *Leica Owner* choose your gift from the complete selection of *Leica Accessories* at your *Leica Dealers*.

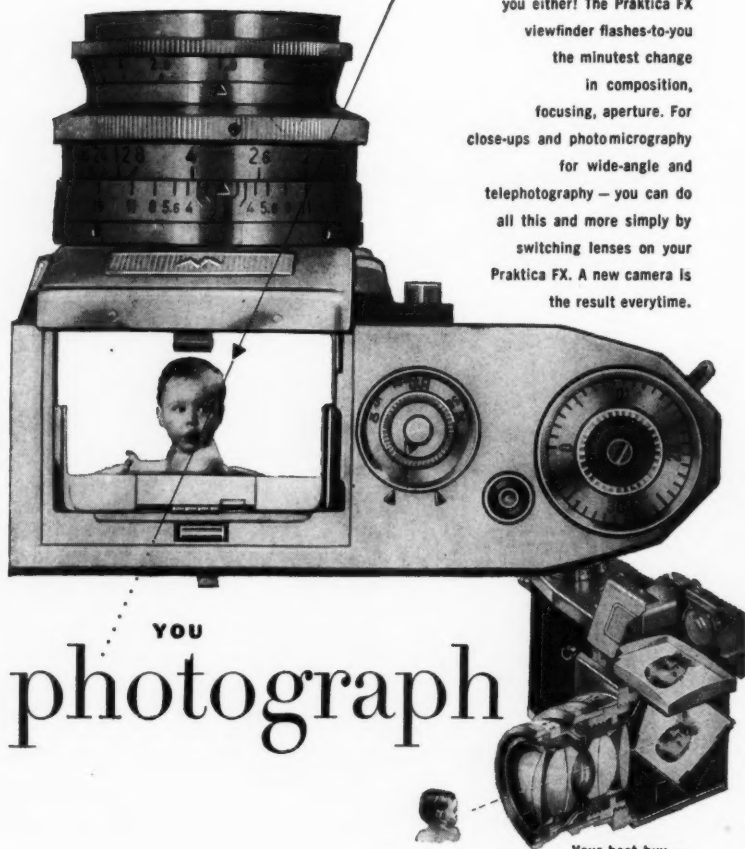
**E. LEITZ, Inc., 304 Hudson Street
New York 13, N. Y.**

LEICA CAMERAS AND ACCESSORIES
LEITZ MICROSCOPES • BINOCULARS
SCIENTIFIC INSTRUMENTS

WHAT YOU

see
here...

As your eye sees,
your Praktica FX records!
Praktica FX's single-lens reflex
design means no guess,
more success, the very most
in visual accuracy. And no
parallax to photo-plague
you either! The Praktica FX
viewfinder flashes-to-you
the minutest change
in composition,
focusing, aperture. For
close-ups and photomicrography
for wide-angle and
telephotography — you can do
all this and more simply by
switching lenses on your
Praktica FX. A new camera is
the result everytime.



YOU
photograph



Your best buy —

the Praktica FX with f/1.9, 58-mm.
V-coated Meyer Primoplan lens. At \$139.50.
Others \$199.50 to as low as \$99.50.

Write for booklet No. 1008 to Dept. Y13,
The Praktica Company, Inc., 48 West 29th Street, New York 1, N.Y.

Exclusive sales and service representative
in the U.S. for the KW-OPTIK WORKS, GERMANY.

praktica

35-MM.
SINGLE-LENS
REFLEX

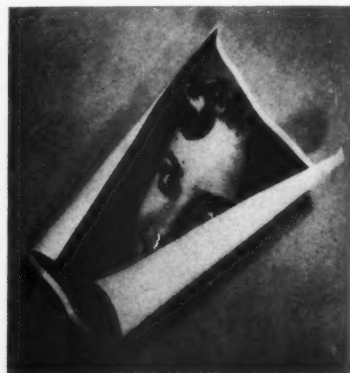


ENLARGING, A TO Z

(Continued from page 104)



36. & 37. After print has washed about an hour, hang it up to dry with a couple of plastic clothespins. Two more pins on the bottom act as weights to prevent excessive curling. Despite this precaution there will probably be considerable curl in the print. This can be removed by piling some heavy books on it for a day. The print must be on a solid, flat, smooth surface, and the weight must be at least as large as the print, flat and smooth, to avoid marks. There are other ways to dry prints, which will be illustrated in a future article.



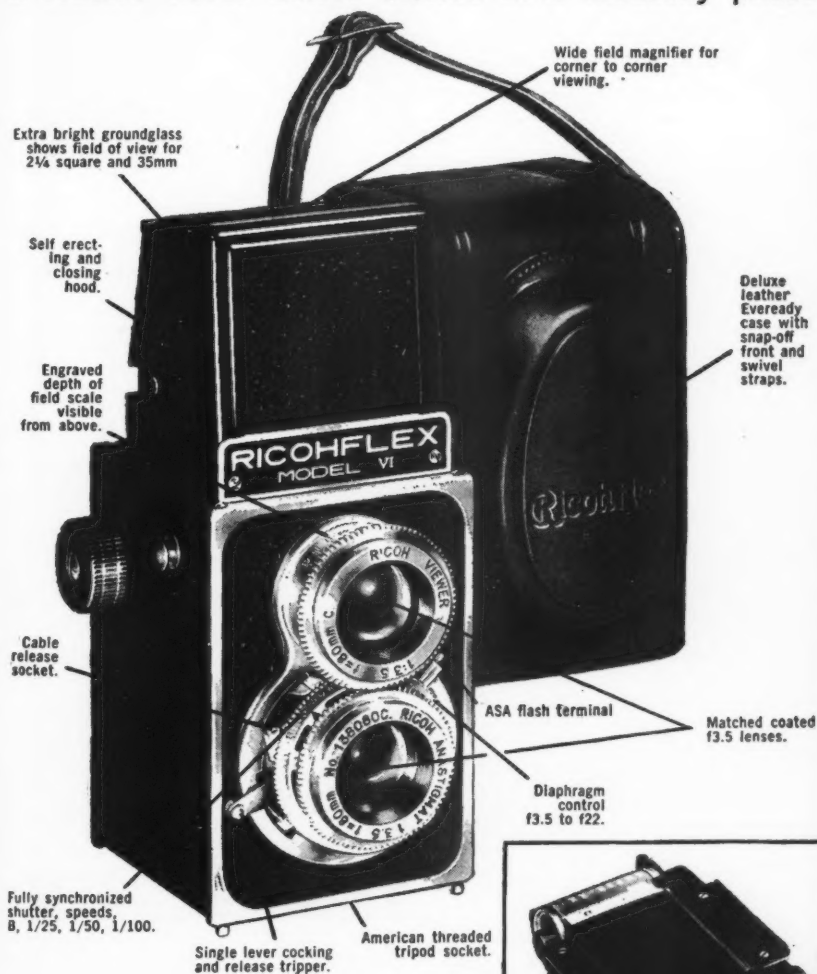
38. Here's the final print! Of course, it may need spotting, it ought to be mounted and you may decide on further steps to enhance its beauty. All these steps and more will be covered in future installments of this series.—THE END

At last ... 2 1/4 x 2 1/4 and 35mm

simply and economically **COMBINED** in the new, more versatile than ever

RICOHFLEX VI

a feature never before offered in a modestly priced twinlens reflex camera



RICOHFLEX VI

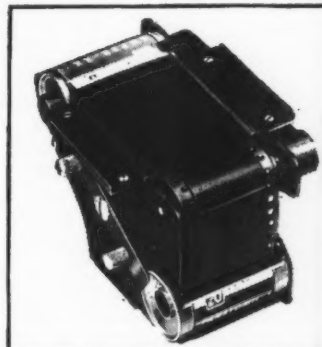
Includes deluxe leather Eveready case.

List **\$50.45**

RICOHKIN 35mm

Back

List **\$18.95**



Never before have so many camera fans decided so quickly on the merits of a twinlens reflex camera as in the case of the RICOHFLEX. Their sound judgment was confirmed by the report of a leading consumer research organization which selected the Ricohflex camera as the "Best Buy."

Its easily recognized features—combined with sturdy construction, uniformity of workmanship and reliability of performance—have put the Ricohflex on the best seller list ever since its introduction on the American Market.

Now with the availability of the ingeniously designed Ricohkin 35mm back, the Ricohflex VI has become the only camera which simply and inexpensively combines the best features of twin lens reflex cameras with the economy and convenience of 35mm film.

The Ricohkin 35mm back is immediately interchangeable with the standard 120 size film cage, utilizes regular 20 or 36 exposure cartridges and has an automatic exposure counter. Film transport knob readily and permanently replaces standard knob for use with either size film.

Photographic Importing and Distributing Corporation

P. O. Box 117, Bowling Green Station, N. Y. 4, N. Y.

AMERICA'S TOP ENLARGER BUY! SOLAR 120

35 mm. to
2 1/4 x 3 1/4 in.
NEGATIVES

DOLLAR FOR DOLLAR
feature for feature . . .
print for print . . . you
just can't beat a SOLAR
120! Here's why:

✓ MATCHLESS PERFORMANCE

The proof of any enlarger
is in the print! You'll get
all the pictorial quality of
the negative . . . all the
sparkle and fine detail!
It's a fact that the over-
whelming majority of Pro-
fessionals and Amateurs
the world over rely on the
SOLAR 120.

\$66.50
Less
Lens

✓ EXCLUSIVE FEATURES

Regardless of price, only
the SOLAR 120 gives you
every modern precision ad-
justment plus such exclu-
sive features as:

1. Quick-loading, Dust-Free Glassless Neg. Carrier that makes changing Negs. a "Snap"!
2. Non-Fogging, Non-Reflecting Red "Non-Actinic" Baseboard. Another SOLAR Exclusive!
3. Removable Standard Lens Board.
4. Money-saving convenient Lens Support that permits you to interchange lenses without changing condensers. Threaded for Leica Lenses.

✓ UNSURPASSED VALUE

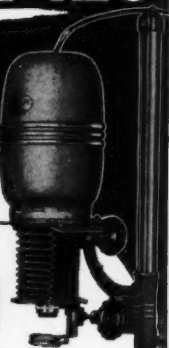
Compare SOLAR's features
and price-tag against any
other Enlarger on the mar-
ket. Compare the years of
experience built into each
Engineered Part. Then you'll
agree with thousands of
leading Professionals and
Proficient Amateurs — it
costs no more to buy the
best . . . SOLAR 120.

Other models up to \$298.50

See your B & J Dealer
or write direct

Burke & James, Inc.

FINE PHOTOGRAPHIC EQUIPMENT SINCE 1897
321 S. Wabash Ave., Chicago 4, Illinois U.S.A.



NO COLD
LIGHT
CONVERSION
NECESSARY

FREE

The complete
illustrated
SOLAR 120
valuable en-
larging tips.
No. 1051H.



FOX TALBOT

(Continued from page 67)

photographers looked abroad with envy.

In France the calotype process was flourishing, even though Talbot had patented it there. Louis Desiré Blanquart-Evrard published in 1847 a slight modification of Talbot's technique which he called his own. Even Frenchmen protested at this outright plagiarism. But at his Photographic Printing Establishment in Lille, Blanquart-Evrard turned out calotype prints by the hundred, from negatives taken by various photographers. In quality, the French calotypes, particularly those made by Henry LeSecq, Charles Marville, and Maxime de Camp (who journeyed on the Nile with the writer Gustave Flaubert), exceeded anything made in England. In 1851 a group of French photographers formed the Société Heliographique, and began publishing a journal, *La Lumière*.

Not long afterwards, an informal meeting was held in London to found a similar society. One of the group, Robert Hunt, asked Talbot if some arrangements could not be made about the patent restriction. Talbot explained that he was forced, for economic and business reasons, to maintain his patent rights. He then made a definite proposition: he would give each member of the society, if it was "formed on a very respectable basis," a license, providing that the prints made by the members were not sold except for the benefit of the society. This generous offer apparently did not satisfy the group, who felt that Talbot should relinquish his rights. Feelings grew, until in an almost unprecedented manner two of the most influential semi-official groups in the land brought the combined weight of their authority to bear against Talbot as if he had been a malefactor.

The President of the Royal Society and the President of the Royal Academy wrote him: "We beg to inquire, whether it may not be possible for you, by making some alterations in the exercise of your patent rights, to obviate most of the difficulties which now appear to hinder the progress of the art in England." Talbot's reply, printed in *The Times* on August 13, 1839, was to give his patent "as a free present to the public"—with one exception, "the application of the invention to taking photographic portraits for sale to the public."

Talbot's gift removed all obstacles for the practice of amateur photography. In 1853 the Photographic Society of London (now the Royal Photographic Society of Great Britain) was formed.

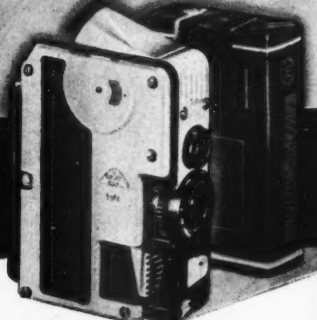
But already the calotype was becoming obsolete along with the daguerreotype. More and more photographers were working a new process: collodion. Glass plates flowed with collodion (in

Midget in Size • Master in Performance

GOERZ

MINICORD

16 MM FOCUSING REFLEX CAMERA



• Newest, finest 16mm still camera . . . Minicord combines all advantages of the best minicams with many new advancements . . . Roof-prism focusing through 1.2 power teles ope produces clear upright image; Goerz Helgof 1/2 coated lens; automatic one-hand operation; magazine loading; 10x10mm picture on 16mm film gives splendid enlargements. Incomparable gift . . . At leading stores \$149.50, incl. case. Write for interesting booklet M.

KING PHOTO IMPORT CO.
1133 Broadway • New York 10, N. Y.

RABINOVITCH

" . . . well known for the high quality of students . . . many of them becoming famous professionals and amateurs . . . 34th year. Write today for booklet M-19. Rabinovitch Photography Workshop 40 W. 56 New York 19

35 MM Developed \$1.50
36 Enlargements \$1.50
20 exp. 65c. • 36 exp. refill 60c. 8 for \$2.50
You can count on us for beautiful finishing at attractive prices. Thirty years of careful service—the finest and latest equipment with exclusive improvements—and a record of satisfying thousands of customers for many years—give assurance of dependable high-quality 35 MM developing and printing.

8 Exp. DELUXE OVERSIZE 40c
Rolls FINISH-ONLY

12 exp. 55c. • 16 exp. 70c. • Oversize Reprints 5c each
Popular size rolls now finished in our new, unsurpassed Jumbo Oversize style at same price as contact. You will be delighted with the unusually fine quality of our new oversize, date-embossed prints. Get full value from your photography—send roll and money to us or write for FREE Mailers and complete Price List.

MAIL-BAG FILM SERVICE
Dept. 8 Box 5448A Chicago 68, Ill.

PERFECT FOR CAMERA UPKEEP



Shown here is the New #PA-5 Moody Kit with five interchangeable tools made especially for tiny Allen and Phillips fasteners found in camera. Ask your dealer for them. And write us for free folder.

Moody MACHINE PRODUCTS CO. INC.
23 DUDLEY STREET, PROV., R. I.

which a soluble halide was dissolved) were plunged into silver nitrate. While wet, the plate was developed in iron sulphate. The transparent glass negatives yielded prints richer in detail than could possibly be obtained with paper. The plate, when backed with black, produced a direct positive resembling a daguerreotype—called, in America, ambrotype.

The new technique was the invention of Frederick Scott Archer. In 1851 he published full working directions in the magazine *The Chemist*. He exacted nothing, not even the use of his name to describe the process, though his friends tried to put in circulation the word "archerotype".

Professional portraitists not only found this new technique superior, but they saw in it a way to avoid dealing with Talbot. Their attitude was summed up in a caricature showing photography as the infant Hercules strangling two serpents, one labelled "Daguerre's Patent," and the other, "Talbot's Patent." But Talbot, with scientific justification, maintained that Archer's technique was a modification of his calotype process, and he insisted that all who took portraits professionally with collodion plates were guilty of infringing his patent. To protect his business interests—he had set up a portrait studio for his assistant, Nicolaas Henneman—he felt obliged to prosecute.

Talbot acts

Thomas Sims had two galleries in London, where he took portraits on glass plates. He claimed that one day he received a letter from Talbot, praising his collodion work, and requesting an interview. Flattered by the invitation of so eminent a man, Sims hastened to the rendezvous. There, he said, he found waiting for him, not Talbot, but Talbot's attorney, who advised him that he was guilty of infringing his client's technique. A license would cost £325 a year. It was staggering to the twenty-seven-year-old photographer. "I might as well be ruined by not paying Mr. Talbot as be ruined by paying him," he wrote in his journal. He refused to pay, and his business was closed by court order. The sheriff nailed shut the doors of James Henderson's two London galleries, even though the judge was so unsure of his guilt that he felt the case should be tried. However he forced Henderson to cease business pending trial because "if the defendant was permitted to make these photographic impressions, all others would have a right to do the same."

English patents have a life of fourteen years. Talbot's basic patent was due, therefore, to expire in 1855. He applied for a renewal in July, 1854. The Council of the Photographic Society called a

(Continued on next page)

100%
American-Made

now there are 2

C.O.C. POCKET FLASH

B-C (Battery Capacitor)

ALL-METAL B-C POCKET FLASH

\$15.50 incl. battery

ALL-METAL BATTERY MODEL

\$9.95

JUNIOR B-C POCKET FLASH

\$9.95 incl. battery

JUNIOR BATTERY MODEL

\$5.95

HERE'S the world's finest, most compact flash gun... new made in 2 price ranges! All-Metal, for the fan who wants the very finest for his higher-priced camera... and NOW, the budget-priced JUNIOR MODEL, made of handsome, unbreakable TENITE II. With these 2 models, you now have a C.O.C. POCKET FLASH for every purse, as well as for every camera! Both feature detachable reflector, interchangeable cables and battery-capacitor circuit that fires up to six bulbs using extension outlet. Standard battery models available, too!

Complete with interchangeable cable and straight or angle bracket (or mounting shoe) TO FIT ANY CAMERA!

SPECIAL DESIGN

Unique mounting permits aiming reflector at any angle for soft reflected bounce-light. Especially helpful in portraits or for any other lighting effect.

BUILT-IN TEST LITE

Standard GE Bulb flashes it circuit is complete when switch is pressed. Assures dependable operation.

At your dealer or write direct to:
CAMERA OPTICS MFG. CORP. 101 West 47th St., N.Y.C.

Here's the perfect gift for camera fans

STEREO-TACH

You give a lifetime of 3-dimensional photo thrills with this novel accessory. Stereo-Tach converts a regular camera into a Stereo camera... one that will take full color or black and white pictures in life-like 3-dimension. Outfits come complete. Handsomely boxed. Satisfaction guaranteed. At dealers or write direct.

OUTFIT #101 makes slides with 35 MM cameras. Includes slide viewer.

List \$17.70

OUTFIT #100 makes prints with 35 MM or larger cameras. Includes print viewer.

List \$16.25

OUTFIT #100-PL makes prints with Polaroid cameras. Includes print viewer.

List \$16.25

***Tach-Lite #303** illuminates Stereo-Tach slides. Fits standard slide viewer. **List 4.95**

***Tach-Lite #606** includes slide viewer. **List 9.75**

ADVERTISING DISPLAYS, INC. 419-B Pike Street, Covington, Ky.



MC300 PROJECTOR

**The standard by which all other
projectors are judged!**



The American Optical Company "MC 300" is the modern 2x2 slide projector designed for both the enthusiastic amateur and discriminating professional!

Top quality optical and engineering progress makes possible a projector that offers more illumination with a 300 watt bulb than most projectors with a 500 watt... triple action blower system assures maximum film safety plus cool-to-the-touch handling... silent Autofocus slide carrier aligns every picture perfectly... simple elevating device for quick screen centering... sturdy, streamlined design.

New Low Price

MODEL 3810 **\$84⁵⁰**

American Optical

INSTRUMENT DIVISION—PROJECTORS—CHELSEA, 50, MASS.



QUICK-SET[®] tripods

for "Sure-Footed Shooting" ANYWHERE

The balanced sturdiness of a Quick-Set is appreciated by professionals and amateurs alike when it provides solid camera security on even the roughest terrain. You are always assured of sharp, clear movies and still shots with a Quick-Set. There's nothing finer than its easy, speedy elevation and wide-sweep crank control; versatility of its wide-angle pan head action that pans 360°, tilts 150° from straight down; plus the utter dependability of lightweight aluminum easy-to-adjust legs. You'll agree, when you compare results, a Quick-Set Tripod is *your* most important camera accessory, too.

There's a Quick-Set Tripod for Every Use and Camera—\$14.95 to \$33.50

FREE!
catalog showing
Quick-Set Tripod
models.

MAIL COUPON TODAY

QUICK-SET, INC. Dept. M.P. 1-53
1312 N. Elston Ave., Chicago 22, Ill.

Please rush me a FREE copy of your illustrated catalog of famous QUICK-SET Tripods.

Name _____

Address _____

City _____ Zone _____ State _____

My Photo Dealer Is _____

FOX TALBOT

(Continued from page 109)

special meeting to discuss what action, if any, should be taken. A letter was read from Martin Laroche, one of the professional portraitists Talbot was in the act of prosecuting. Laroche announced that his lawyer had entered a caveat (a notice to halt an act until those opposed to it are heard) against Talbot's application for an extension of his patent term. "It is my intention," Laroche said, "to resist such application to the utmost of my power, and in so doing, I trust that I may meet with the well wishes and support of all who are interested in the art of photography." The members were divided in their reaction.

The case of Talbot v. Laroche was brought to trial in December, 1854. The defense attempted to show that Talbot was not the true inventor of photography and was not entitled to the patent in the first place, and that even if he was entitled to patent the calotype technique, the collodion process was separate and distinct. The evidence became increasingly technical, so that the judge was bewildered. "I confess I am afraid I do not understand it," he told the jury in his summing up. But it was clear to the jury that—in the eyes of the Patent Law—Talbot was indeed the inventor of the calotype process and entitled to the patent. But the jury felt that the collodion process was sufficiently different so that it could not fall under the patent specification. Laroche was found not guilty.

Talbot was not at all satisfied. He wrote to his wife, "The jury understood little of the subject, but trusted to the judge, and the judge fell into awful mistakes, not being able to comprehend the process which he had never tried. It is impossible we can rest content with the summing up of the judge." But he never appealed.

In the meantime, Talbot devised a technique for photographing on glass which closely resembled the albumen process of Niepce de Saint Victor. A glass plate was coated with white of egg. Silver salts were formed on this surface by treatment with silver nitrate, protiodide of iron, acetic acid and alcohol. The plate was exposed while wet and developed with iron sulphate. Talbot noted that, like a collodion plate, the result appeared "either negative or positive, according to the light in which they are held." He claimed that he observed this phenomenon before the collodion process was published.

With his new albumen plates, Talbot took in 1851 a photograph by the intense, brief light of an electric spark. He chose as a subject a rapidly revolving wheel, on the rim of which had been fastened a copy of *The Times*. The resulting positive picture was detailed enough so that

the headlines could be read. How accurately Talbot predicted the future we are only now beginning to realize. "It is in our power," he wrote, "to obtain pictures of all moving objects, no matter in how rapid motion they may be, providing we have the means of sufficiently illuminating them with a sudden electric flash. . . ."

In 1852 Talbot was working on yet another application of photography; the production of metal plates from photographs which could be printed in a press. He called this "photoglyphic engraving," and in the course of his experiments he added one more basic invention to the formidable list already to his credit.

The half-tone

He was using metal plates coated with gelatin mixed with potassium bichromate. On exposure to light this mixture, soluble when mixed, hardened and became insoluble. If a plate prepared with this mixture was exposed beneath an engraving, or drawing, the gelatin lying beneath each separate line would be protected from the light, but the rest of the plate would be insolubilized. When washed with water, the metal would be laid bare exactly where the lines appeared in the original. An etching fluid, poured in the furrows, would eat away the metal, forming grooves which would hold ink. The plate could be printed exactly like a visiting card. Thus far Talbot's invention did not embody any new principle. Talbot then thought of breaking up the half-tone areas into minute dots of light and dark by first exposing the plate under a piece of crape, folded so the threads crossed at an angle of 45 degrees. He later used a ruled glass screen. This technique, the half-tone screen, became fundamental to almost all graphic arts techniques. The illustrations in a newspaper, examined under a reading glass, will be seen to be made up of a series of black dots. It was Henry Fox Talbot who showed the world how to do this.

This was the last of Talbot's photographic inventions. By the 1860's his chief interest—apart from mathematics and theoretical physics about which he wrote continually—was the deciphering of cuneiform inscriptions of ancient Assyria. He was never out of touch with photography, however, and was writing an account of his work in that field when he died, on the 17th of September 1877, at Lacock Abbey. The unfinished manuscript was completed by his son Charles and published as an appendix to the second edition of the English translation of Gaston Tissandier's *History of Photography*. Even this account does not give the full story of Talbot's contributions to photography, which only now we are beginning to realize. No single inventor did more.—THE END

SHOW YOUR 8/8mm or 16mm MOVIES The Same Day You Take Them

By HOME PROCESSING with a SUPERIOR DELUXE CINE REEL

Process your movie film in less than an hour with this outfit. **Save up to 50%** on your movie-making! Complete with tray and drying rack. Holds 110 ft. 16mm or 8/8mm film. Compact: 16" x 26" x 30" high. Shipping wt. 18 lbs. Price complete with formulae and instructions F. O. B. Chicago **\$19.95**

JUNIOR Processing Kit

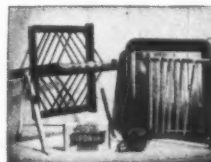
Top value in low-priced field. A complete home processing unit. Developing rack holds 30 ft. double 8mm, 16mm or single 8mm film. Drying rack holds 50 ft. Chemical tray holds 1 gal. chemicals. Shipping wt. 10 lbs. Complete with instructions **\$6.50**

Superior COLOR Film

This full, natural color film is available in Bulk for home loading into magazines or on spools. (Free instructions furnished.) Save excise tax by buying in bulk! Indoor or outdoor types available. (Film speed same as Kodachrome.)

200 ft. 16mm or 8/8mm Color Film **\$9.95**
(Shipping wt. 1 lb.)

Processing charge for Color Film
16mm—100 ft. or less **\$2.50** Post-
16mm—50 ft. or less **1.75** age
8/8mm—25 ft. or less **1.50** Extra

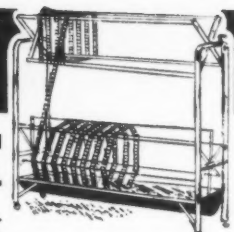


SAVE MONEY

Use Superior BULK Film

Whether you process it yourself or send it to us for processing, you can make big savings. No excise tax on bulk film! Superior Bulk Film is fresh, fine grain film made by DuPont.

200 Ft. Rolls
Double 8mm **\$4.50**
16mm **3.85**
Empty Camera **Empty Camera**
MAGAZINES SPOOLS
8mm each **\$1.50** 8mm each **.25**
16mm each **.75** 16mm 100 ft. **50c**



"How to Process Movie Film"
Simplified processing of movie film—the big little book that has formulae and instructions on how to do it yourself. Post-paid 25c.

Superior Reversal Chemicals

Just add water. Simple instructions. Complete set includes 2 developers, bleach, clear and hardener.

1 gal. set (complete) **\$2.90**
½ gal. set (complete) **1.80**

Plus Postage

Reversal Processing

We will process any black & white 8/8 or 16mm, silent or sound film by automatic machine. Uniform, professional processing carefully controlled. Your camera spools or magazines are returned.

16mm—100 ft. or less **\$1.25** plus
16mm—50 ft. or less **.75** Post-
8/8mm—25 ft. or less **.55** age

ORDER NOW! SATISFACTION GUARANTEED

Send for new free catalog and Processing Manual. Hundreds of bargains. All sold on unconditional money-back guarantee.

SUPERIOR BULK FILM CO.

HOME PROCESSING HEADQUARTERS

Dept. 1-MP 105 S. Wells St. Chicago 6, Ill.



REVIEWER 500

For Both 2¼" x 2¼"
and 2" x 2" Transparencies

No. 3840
with 5" objective
\$9500

(2" x 2" accessories
and case extra)

Now 2¼" x 2¼" color projection enthusiasts can enjoy the professional results for which AO Projectors are famous... brilliant image quality, luxury operation, enduring construction.

For the first time, here is a 500 watt projector that brings out the finest details and truest colors of your 2¼" x 2¼" slides... brilliance and picture quality unmatched by any comparable make. Each slide is automatically centered by the push-thru slide-changer... refocusing and recentering are eliminated. The combined performance of the AO patented heat absorbing glass and triple-action blower guarantees complete protection to slides. Fingertip elevating lever centers screen image easily and accurately. All metal construction... attractive maroon and gray... choice of 5" or 7" Americote Lens.

American Optical

INSTRUMENT DIVISION—PROJECTORS—CHELSEA 30, MASS.

Convince yourself. Ask for a demonstration of the NEW Reviewer 500
Today

KLEIN'S OWN IMPORT GERMAN 35mm. CAMERA



Save the extra cost of the famous maker's label . . . get the same craftsmanship . . . F3.5 coated lens . . . self timer . . . synch shutter, 1 to 1/300

\$32.50

Unconditionally guaranteed. Money back in 10 days if not satisfied.

**BUY
SELL
TRADE
with**

KLEIN for KAMERAS

Sid Klein
WE 1-1000

7916 Beverly Blvd. at Fairfax
Los Angeles 48, Calif.

**Zeiss
Ikon
Cameras**

Zeiss Ikon Cameras have long been noted for precision construction and superb optical quality. See them—at leading dealers.

EdnaLite

DURAKLAD COATED • SOLID OPTICAL GLASS
Universal FILTER KITS

. . . each with adapter, dual-retainer and selected sunshade . . . for BOTH Black & White and Color picture-taking. FREE Lifetime Karry-Kase!

for **BOLSEY
B2 and C**

Four Series V Dura-Klad-rimmed Filters: Y-2 (K-2) Klad-rimmed Filter, yellow; R-2 (#25-A) med. red; ChromHaze Sky-light (#1-A) and ChromA Conversion (#85). Mini-shade, dual-retainer and 24mm adapter . . . PLUS lifetime Karry-Kase . . . complete **\$13.50**

EdnaLite Universal Filter Kits are made for all popular cameras, including: Argus C3 & C4; Bellini; Contax; Canon; Edinex III; Exa; Exakta; Kodak Signet, Pony, Retina II & IIa & Reflex; Kinar; Leica; Nikon; Praktica; Rollei; Rollei; and special kits for Contessa and Stereo Realist. There's an EdnaLite Kit for your camera . . . ask your dealer, or write to:

EdnaLite OPTICAL CO., INC.
Peekskill, New York

BIGGEST FLASH

(Continued from page 53)

deadline, and get the following setup arranged: Fifty controlled light reflectors, made of 3 x 4 ft. sheet aluminum curved by wires to cover a specific area, were put in position. Each had eight sockets, and was mounted on a special tripod. Then eighty flexible 4 x 6 ft. aluminum-type foil reflectors, designed to flood large but carefully planned areas, were laid among the formations, and clusters of sockets were placed on them—also according to Helm's plan. This called for low key lighting in the foreground, medium key in the middle, and high key in the background.

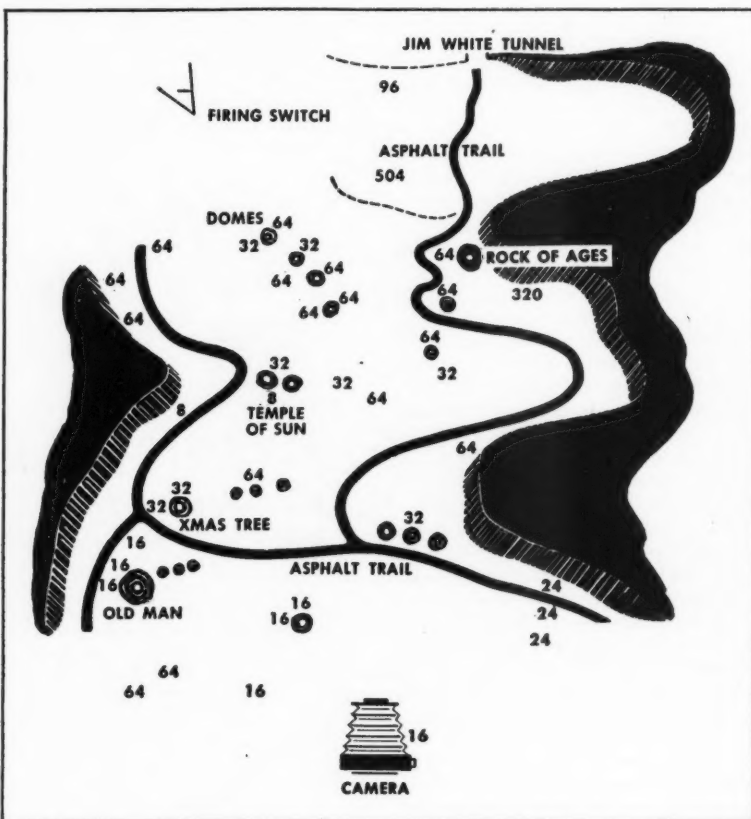
What about wiring?

Wiring could have been done in several ways, but Martenson picked the method which would use the least power. This was a series-parallel hookup, for which groups of eight bulbs were wired together in series, like Christmas tree lights. On the day of the shot each of these series-wired groups was tied in

parallel to the transformer which would supply it with 110-volt AC.

Lots of power was needed, and it came from a 2200-volt feeder line, which along with seven of the ten transformers used, was a permanent part of the Caverns' equipment, supplying light for all the trails. The three non-Cavern transformers were added to balance the load, and leave a wide safety factor.

In the eerie Cavern light, crews worked rapidly under the supervision of technicians from Sylvania and other experts, checking wires, screwing in bulbs, and putting together the 15-ft.-high camera scaffold. Nineteen cameras were fastened to an 18-ft. plank on the scaffold and looked over the Big Room. Besides a Stereo-Realist and four 8 x 10 Eastman View Cameras, there were 14 4 x 5 cameras—a Linhof Super Technika, a Meridian, a Brand-17, five Speed Graphics, and six Graphic view cameras. All but the Stereo-Realist (which used Kodachrome Type A and the equivalent of the present-day 81D filter) were loaded with Ektachrome, Type B film from the same emulsion batch, donated by



Here's how 2,400 flashbulbs were placed to photograph Carlsbad Caverns' Big Room (page 52)—and set a new world's record for multiple flashbulb photography. The numbers on this aerial-type diagram represent groups of bulbs, which were placed in reflectors described in the text. The small circles show rock formations. As you can see by comparing the diagram with the final shot, some of the flashbulbs were carefully placed outside of the camera's viewing range. Originator of this lighting plan was Carlsbad photographer Tex Helm.

Eastman Kodak. To balance the Ektachrome to flash, 81C gelatin filters were fastened behind the lenses with cellulose tape. Camera stops were set from f/16 to f/32 even though a black-and-white test shot of a section had been made the night before. After all, a retake was out of the question. And, as it turned out, calculations were within one stop of the perfect exposure.

Ready to shoot

Just what was the timetable for taking this shot? By 1:09 A.M. everything was ready, and all activity was at a standstill. The people who were to be photographed in the room to give it scale had already been placed in position, told where to look, and cautioned against smoking or making any kind of light. Then the entire room was plunged into darkness, and the following schedule was carried out using voice signals:

Fifteen minutes to switch over from Cavern lighting to Project Flash.

Five minutes for Helm and assistant D. E. Inkley of Eastman Kodak Co. to pull slides and open shutters.

One minute for Claude Carpenter, chief electrician of the Caverns, to throw the 2200-volt oil switch. At exactly 1:30 A.M. a blinding flash illuminated the room with light equal to that produced by over four million standard 60-watt lamps. Some who were there said that it was the greatest light produced in the State of New Mexico since the explosion of the first atom bomb. And the two bulbs which failed to flash made no real dent in the amount of light produced. In the rush of getting things set up for the shot, rough handling must have allowed air to penetrate the bulb envelope. For that reason the bulbs didn't go off, though electrical contact in their series was maintained.

More to go

Yes, the big shot was over—but still the 8 A.M. deadline had to be met. Slides and shutters were closed in five minutes, wiring was switched back to Cavern lighting—and cleanup crews swung into action. By 7:45 A.M.—just 15 minutes before the Caverns' tours began again—not a trace of the night's operations was left for visitors to see. But a great deal had happened since 4 P.M.—and a new multiple flash record had been set in the Big Room—Cora Alsberg.

Note: The world's biggest flash picture is at present the property of Tex Helm—but arrangements have been made to supply 35mm slides, regular stereo slides, or prints of this photograph to MODERN's readers. They are available at a reasonable price. For additional information write: Flash Editor, MODERN PHOTOGRAPHY, 251 Fourth Avenue, New York 10, N. Y.

**NONE FINER...
NONE BETTER...
than the**

canon

35mm Camera

WITH THE
SERENAR 50mm Coated f1.8 Lens



5 Year Guarantee
List Price \$295.
Federal Tax Included

Whatever standards may have previously existed... this is now true, there is no finer, no better 35mm camera than the CANON IV. And there are no finer, no better lenses than the CANON SERENARS. Only the painstaking care and attention devoted by the maker to the minutest details of design and production can account for these unparalleled results in performance.

ONLY THE CANON IV
FEATURES THE
SINGLE EYEPiece
RANGE-VIEWFINDER
WITH VARIABLE
IMAGE MAGNIFIER



CANON is truly the name to remember when you consider a 35mm camera and lenses in terms of precision craftsmanship and picture perfection. It is revealing of the manufacturer's confidence in his product that the CANON IV is the only 35mm camera with a 5 year guarantee.

Ask to see the CANON IV at Your Dealer.

Imported by

BALFOUR, GUTHRIE & CO., LIMITED

67 WALL STREET, NEW YORK 3, N. Y.

331 CALIFORNIA STREET, SAN FRANCISCO 4, CALIF.

SAVE UP TO \$25 OVER 100,000 SATISFIED USERS!



"IDEAL" EXPOSURE METER

Accurate photo-electric light meter, for perfectly exposed pictures. Reads directly in "f" stops,—no calculating. Simple, quick, easiest to use. For all movie and still cameras, regular or color film.

\$9.95

"IDEAL" RANGEFINDER

Precision optical instrument shows exact distance for perfect focusing and clear, needle-sharp pictures. Just look through finder and turn knob until double images come together. Specify metric or feet scale.

\$2.95

THREE YEAR GUARANTEE

With DROP-FRONT LEATHER CASE

AT YOUR DEALER

Or Send Check Or Money Order Direct. WE PAY POSTAGE

FEDERAL INSTRUMENT CORP.

Dept. MPI 14-02 Broadway, L. I. City 6, N. Y.

A PRACTICAL GIFT TO GIVE
A USEFUL GIFT TO RECEIVE

STATIC masters for Christmas

ATTRACTIVELY
BOXED IN GAY
COLORFUL
HOLIDAY
WRAPPER



Print spotting and negative opaquing reduced to a minimum... Static-Masters simultaneously neutralize static and remove dust and lint in one sweep. Buy Static-Masters at your local photographic store or sent prepaid if cash with order.

NUCLEAR PRODUCTS CO.
10177 E. RUSH ST. • EL MONTE, CALIF.

COLOR PRINTS

IMPROVED COLOR PROCESS, developed in our laboratory, produces QUALITY unobtainable from any other source. Our color prints are SUPERIOR to any produced in the country. Equally SUPERIOR results in COLOR FILM processing, especially Ansco Color.

Color prints 2 1/2 x 3 1/2 4 x 5 5 x 7 8 x 10
Price each .30 .60 1.25 2.50
COLOR FILM \$1.00 per roll
35mm size mounted free, 120,620 in sleeves
Save TIME and COD charges—remit with order.
Normal service 24 hrs.—returned 1st class mail

COLONIAL LABORATORIES
COLOR DIVISION
1333 Milton Ave. Pittsburgh 18, Pa.

New photo books

PHOTO-LAB-INDEX, 12th edition, by Henry M. Lester, 1344 pages, cloth bound. Morgan and Lester. Price: Two volume Lifetime Edition, \$17.95; one volume Library Edition, \$10.95.

Considering the wealth of photographic information which was continually being added to its pages, it was only a question of time until the Photo-Lab-Index finally burst its seams. That point has now been reached with the publication of the two-volume Lifetime edition of this standard reference work.

Like its predecessors, the 12th edition is a comprehensive compilation of photographic data, arranged in 24 sections and an alphabetic index covering such phases as film, filters, paper, chemicals, lighting, color, cine, formulae, etc., and kept up-to-date through the use of quarterly supplements. These are available to all registered owners, at a cost of \$3. per year. The supplements are used to replace whatever material has become outdated, in addition to providing entirely new information as it becomes available.

Two new sections, on Ilford and Gevaert products, have replaced the now obsolete sections on Dassonville and Defender, and the older sections have been brought up to date.

The publishers have also made available a one-volume edition, identical with the two-volume edition in content and arrangement. However, it will not accept the quarterly supplements, since it is not loose-leaf bound. In either case, the Index should prove as helpful to the serious photographer as did previous editions.—N. M. Grossman

THE REVOLT OF AMERICAN WOMEN, by Oliver Jensen, 224 pages. Harcourt, Brace and Co. Price \$6.

Oliver Jensen, who is described on the jacket of this book as "a former editor of *Life* magazine," betrays his past through 224 pages of this sometimes witty, usually gay, always interesting picture essay on the last century of American womanhood. The story of this fascinating century of change is wonderfully told with excellent pictures by such people as Lewis Hine, Alice Austen, Jacob Riis and in our own times by Nina Leen, Ruth Orkin, Alfred Eisenstaedt.

To the photographer who buys the book, comes an added enjoyment: the styles of changing photography, the amazing naturalness, ease and power which the earlier photographers managed to get into their pictures. The offset reproduction is quite adequate to the job. Mr. Jensen's editing is really fine. There is but one exception. When you're all finished with the book, you realize that Mr. Jensen has left out of his consideration of American women a salient fact: Millions of

This great \$15 book
for only \$6.95

Hundreds of
photographs by
FEININGER
himself!

if you order
immediately!

FEININGER on PHOTOGRAPHY

YOU MUST ORDER BEFORE JANUARY 1st! Take advantage now of this amazing half-price offer on the original \$15 edition of the famous encyclopedia volume by the Life photographer whose picture stories have made history. It covers completely and authoritatively the *Technique* and the *Art* of making a photograph.

PART I: TECHNIQUE. Equipment, materials, darkroom, functions of the camera, processing of negatives and prints, etc.

PART II: ART. Creative control, contrasts, color (section illustrated in color), space, perspective, lighting, motion, composition, the picture story.

FEININGER on PHOTOGRAPHY

By ANDREAS FEININGER

YOU TAKE NO RISK. Refund guaranteed if you are not delighted after 16-day examination. Order from MODERN PHOTOGRAPHY BOOKSTORE, 251 4th Ave., N. Y. Add 3% tax for New York City delivery.

GIRALAB ALL PURPOSE DARKROOM TIMER MODEL No. 168



Accurate in Seconds and Minutes
Now you can have all these great features in *one* timer.

- Giant 8" Luminous dial
- Range from 1 second to 60 minutes, in seconds

SECONDS for automatic enlarger switching control

MINUTES for film processing

- Automatic Buzzer Alarm
- Electric Clock Motor for accuracy
- Ideal for color film

See It At Your Photo Dealers' Today!

DIMCO-GRAY COMPANY
DAYTON, OHIO

American women now accept working as part of their existence. They do not have "careers" or "talents" or anything exceptional—and they do not work just for the joy of picking up a bit of extra change. They work at the same deadly dull jobs their husbands do, for the same reason—economic necessity. They may not be as eye-appealing as an actress, as exceptional as Channel swimmers, but they do deserve a place in any book about modern American women.—J. J.

BIGGER AND BETTER: THE BOOK OF ENLARGING, by Don D. Nibbelink, 253 pages, many illustrations. John P. Smith Co., Inc. for Garden City Books. Price \$2.95.

If you'd like to try retouching, dodging with matte acetate, vignetting, the Emmermann process, diapositive-master negative control, paper negatives, and many more, Eastman Kodak Company's technical editor tells you how in this book. Less than a third of the pages are devoted to ordinary enlarging techniques, because emphasis is that most straight prints can, and should, be improved in one way or another.

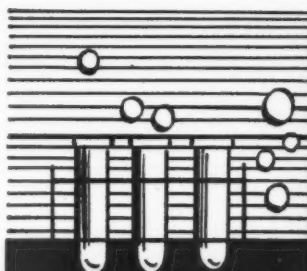
There are also interesting sections on solutions, different types of enlargers, setting up a darkroom—and a list of mechanical print faults, their cause and cure, which should appeal to amateurs who are troubled with spots, or feel their prints aren't up to par. Despite the fact that some processes are not as easy as Mr. Nibbelink would have you believe, this is in general a readable, accurate and handy reference book to have around.—C. A.

PICTORIAL HISTORY OF AMERICAN SPORTS, by John Durant and Otto Bettmann, 280 pages, numerous illustrations. A. S. Barnes and Co. Price \$10.

This large picture history which covers America's favorite sports and heroes from colonial times to the present is far better in its earlier pages than in the final chapters. Reason: while Durant and Bettmann dug up excellent illustrations to tell of our earlier sports history, they completely missed the boat in their choice of photographs to cover the sports history of more recent decades. The photographs are stilted and dull, considering they deal with some of the most photogenic personalities in the world today. They look as if they were all obtained from a stock picture agency. Why, oh why, before all the work and effort was put into this book, why didn't the editors search the files of some of our really fine sports photographers? Then they would have come up with a fine job all the way rather than just 50 percent of the way.—J. J.

All of these books are available through MODERN PHOTOGRAPHY Book Store, 251 Fourth Avenue, New York 10, N. Y.

JANUARY, 1953



COLOR PRINTS

From Any Size
KODACHROME
ANSCO

or
EKTACHROME

WALLET SIZE	.25 ea	5 for 1.00
2x	.30 ea	9 for 2.00
3x	.45 ea	6 for 2.00
4x	.50 ea	5 for 2.00
5x	.90 ea	4 for 3.10
8x	1.70 ea	3 for 4.60

ALL PRINTS DONE
ON NEW IMPROVED
ANSCO PRINTON!!

Minimum Order 1.00
(No C. O. D.'s)



from \$9.95

Order from this ad or WRITE FOR FREE CIRCULAR!
INSIST ON SIMS FOR COMPLETE SATISFACTION!

R. A. SIMERL MFG. CO., Box 333, Madison 3, Wisconsin

IF YOU VALUE YOUR COLOR FILMS

... USE PORIUM TO PRESERVE

YOUR FILMS FOREVER!!

Be sure that your film receives the new PORIUM TREATMENT. All films developed (at PANORAM LABS) receive the PORIUM TREATMENT automatically to insure indefinite life and freedom from damage against scratches and finger marks, due to handling, packaging and projection. PORIUM TREATMENT is the result of a series of tests (of trial and error) over a period of ten years and is now brought to you at no extra cost—exclusively at PANORAM.

NO OTHER LAB CAN MAKE THIS OFFER!!

EXCLUSIVE COLOR PRINTS AND PROCESSING!!!

20 Exp. 35mm Roll Ansco processed with Automatic Mounts

... 1.00 ea., 2 for 1.60, 3 or more .70 ea.

120 size Ansco processed

... 1.00 ea., 2 for 1.60, 3 or more .70 ea.

120 EKTACHROME ... 1.00 PER ROLL

PROMPT SPEEDY SERVICE

35mm FAITHFUL COLOR DUPLICATES } 6 for 1.00
20 for \$2.00

OUT OF THIS WORLD OFFER

• Any 12 Wallet Size **\$1.98**

Note: Inquiries on large quantity duplication solicited. On all orders of 15.00 an additional discount of 5% may be deducted.

On all orders of 25.00 or over a discount of 10% may be deducted.

PANORAM FILM LABS

1190 6th. Avenue New York 19

Sims FLASH UNITS ALWAYS MAKE BETTER PICTURES!

Exclusive etched satin surface reflector gives positive, even lighting—no hot spots! Extension plug-in takes standard extension cord for off-camera flash! Precisely engineered. Styled for ALL FINE CAMERAS with accessory clip on camera body and 3mm or PC shutter flash contact. Highly recommended for Zeiss Contax Ila and Iliia, Contessa 35, Ikonta 35, etc. Ideal for synchronized Retina, Karomat, etc.

Contax Model only \$9.95 (plus \$4.50 for genuine Zeiss cord). Model Ic for Prontor or Compur shutters \$10.95 complete with cord!

SIMS MODEL D-2 FLASH UNITS for all non-synchronized Leica and Leica Type cameras. Nothing special required! Ready for immediate use! Just slide Sims gun into accessory clip and shoot!

ONLY \$17.50 COMPLETE!



PLEASE SAY YOU SAW IT IN MODERN

115

PROJECTOR OWNERS!

Ask your photo dealer for CASTLE FILMS' exciting FOOTBALL PARADE OF THE YEAR—1952 with red-hot shots from all these thrilling college games:

OHIO ST. - NO'WESTERN COLUMBIA - ARMY
PRINCETON - CORNELL TENN. - N. CAROLINA
SO. METHODIST - TEXAS U. C. L. A. - WISCONSIN
NOTRE DAME - NAVY PENNSYLVANIA-GEORGIA

(Subject to change)

CASTLE FILMS
PRODUCED BY UNITED WORLD FILMS INC.


1445 Park Ave., N.Y. 29, N.Y.
All television use of Castle Films' Motion Pictures is reserved and they may not be televised.

VACUUMATE
FILM PROTECTIVE PROCESS

The **SUPER VAPORATE**
PROTECTS AGAINST Scratches, Fingermarks,
Oil, Water and Climatic Changes
**ONE TREATMENT LASTS
THE LIFE OF THE FILM**
Brittle Film Rejuvenated.
LABORATORIES IN KEY CITIES THRUOUT U.S.

Write for Information Now
VACUUMATE CORP., 446 W. 43rd ST., N. Y.

Get More PROFIT and PLEASURE
from
PHOTOGRAPHY
IMPROVE YOUR SKILL
Study AT HOME
LAY FOUNDATION
FOR A CAREER!



Whether you wish to make a career of photography or want to gain additional skill as an amateur, the American School of Photography offers practical basic training which requires only spare time study at home.

With proper aptitude and application, this course should provide you with a fundamental background which may open the door to valuable professional experience . . . or add fascination and zest to your hobby.

OLD ESTABLISHED SCHOOL. Backed by years of experience, our training covers every phase of Modern Photography through spare time study at home. Basic photographic principles are taught by inspiring "learn-by-doing" method, step-by-step, under the supervision of a qualified instructor.

GET FREE BOOKLET! Send coupon today for free booklet, "Opportunities in Modern Photography," and full particulars.

AMERICAN SCHOOL OF PHOTOGRAPHY
835 Diversey Pkwy., Dept. 1941, Chicago 14, Ill.

AMERICAN SCHOOL OF PHOTOGRAPHY
835 Diversey Pkwy., Dept. 1941, Chicago 14, Ill.
Please send me without obligation your free booklet, "Opportunities in Modern Photography," and full particulars. No salesman will call.

Name.....
Address.....
City.....Zone.....State.....

STEREO PORTRAITS

(Continued from page 72)

Most stereo camera manufacturers have made it easy to use flash—too easy. The results of flash-on-camera technique are always less pleasing than well-lighted scenes. Flash-on-camera is an expediency only, common in press work, where speedy action and positive results are most essential and the quality of lighting is secondary. For serious portraiture, the flash must be removed from the camera.

All modern stereo cameras are equipped with built-in flash. By using synchro connecting cords the flash may be removed from the camera. Not all flash guns, however, are readily modified for use off the camera or for extension flash work. Your individual equipment problems are best presented to your camera dealer for solution.

The exact positioning of the key flash-bulb light can be determined with the 60-watt bulb and extension cord. The guide number specified for bulbs (see manufacturer's data on carton) is intended as an aid in determining the correct aperture at which the camera must be set when the light source is a selected distance from the camera, and the full effect of the light is available from the camera point of view. When the light is moved markedly to one side or the other from the camera position, illumination from the camera's viewpoint becomes uneven, the side of the face closer to the light receiving the most. The guide number must therefore be decreased slightly for the proper overall exposure. Just how much, only experience with your equipment will tell you.

By using an extension flash in addition to a key light, a second flash may be used to provide an accent on the hair and shoulders of the subject, and to give separation where a dark background is employed. The second light must be placed high enough to illuminate the back of the head and not shine into the camera lenses (top, page 73).

"Pink eye" goes hand-in-hand with flash-on-camera technique in stereo. To those fortunate few stereographers who have never encountered it, we might explain that "pink eye" is the alarming red glow from the eyes of a person or animal that appears in so many flash pictures. It is caused by the beam of light from the flash-on-the-camera entering the pupil of the eye and being reflected back from the tiny red blood vessels that make up the rear surface of the eyeball.

"Pink eye" occurs most frequently when flash pictures are taken in a room where the light level is low. This causes the pupils to open up and a wide area for the beam of light to enter and be reflected back into the camera lenses.

To avoid "pink eye" move the flash a

Custom Quality DEVELOPING & PRINTING

at "ordinary-finishing" prices!

35mm Positive
PROJ. SLIDES
from ANY SIZE
negative or photo
by Photo Electric mounted
on safety film

5¢
from 35mm
film, un-
mounted,
10¢ mounted

YOUR
Guarantee

25¢
IN CARDBOARD
MOUNTS OR STRIPS
from negs. 35mm
40¢ from prints

25¢
Full money
back
plus
replacement
of your roll
of film
if our
fine
grain
service
does not
meet the
requirements
of all
photog-
raphers.

**35mm FINE GRAIN
DEVELOPING**

Prompt service for the photographer
who isn't satisfied with "ordinary"
finishing. Try National today!

36
salon
quality
3 1/4 x 4 1/2

35mm reloads
36 exp. reloads, numbered
safety film, fresh—all film
reloaded from 100' original
factory packed Kodak
film. Plus Super XX,
65c ea.—\$ for \$5.00

2.00
ENLARGEMENTS

ROLL FILM
developed & enlarged

120, 12
exp. to su-
perb 4 1/2 x
4 1/2, 3 1/2 x
3 1/2, 2 1/2 x
2 1/2, 2 1/4 x
2 1/4, 2 1/8 x
2 1/8, 2 1/16 x
2 1/16, 2 1/32 x
2 1/32, 2 1/64 x
2 1/64, 2 1/128 x
2 1/128, 2 1/256 x
2 1/256, 2 1/512 x
2 1/512, 2 1/1024 x
2 1/1024, 2 1/2048 x
2 1/2048, 2 1/4096 x
2 1/4096, 2 1/8192 x
2 1/8192, 2 1/16384 x
2 1/16384, 2 1/32768 x
2 1/32768, 2 1/65536 x
2 1/65536, 2 1/131072 x
2 1/131072, 2 1/262144 x
2 1/262144, 2 1/524288 x
2 1/524288, 2 1/1048576 x
2 1/1048576, 2 1/2097152 x
2 1/2097152, 2 1/4194304 x
2 1/4194304, 2 1/8388608 x
2 1/8388608, 2 1/16777216 x
2 1/16777216, 2 1/33554432 x
2 1/33554432, 2 1/67108864 x
2 1/67108864, 2 1/134217728 x
2 1/134217728, 2 1/268435456 x
2 1/268435456, 2 1/536870912 x
2 1/536870912, 2 1/1073741824 x
2 1/1073741824, 2 1/2147483648 x
2 1/2147483648, 2 1/4294967296 x
2 1/4294967296, 2 1/8589934592 x
2 1/8589934592, 2 1/17179869184 x
2 1/17179869184, 2 1/34359738368 x
2 1/34359738368, 2 1/68719476736 x
2 1/68719476736, 2 1/137438953472 x
2 1/137438953472, 2 1/274877906944 x
2 1/274877906944, 2 1/549755813888 x
2 1/549755813888, 2 1/1099511627776 x
2 1/1099511627776, 2 1/2199023255552 x
2 1/2199023255552, 2 1/4398046511104 x
2 1/4398046511104, 2 1/8796093022208 x
2 1/8796093022208, 2 1/17592186044416 x
2 1/17592186044416, 2 1/35184372088832 x
2 1/35184372088832, 2 1/70368744177664 x
2 1/70368744177664, 2 1/140737488355328 x
2 1/140737488355328, 2 1/281474976710656 x
2 1/281474976710656, 2 1/562949953421312 x
2 1/562949953421312, 2 1/1125899906842624 x
2 1/1125899906842624, 2 1/2251799813685248 x
2 1/2251799813685248, 2 1/4503599627370496 x
2 1/4503599627370496, 2 1/9007199254740992 x
2 1/9007199254740992, 2 1/18014398509481984 x
2 1/18014398509481984, 2 1/36028797018963968 x
2 1/36028797018963968, 2 1/72057594037927936 x
2 1/72057594037927936, 2 1/144115188075855872 x
2 1/144115188075855872, 2 1/288230376151711744 x
2 1/288230376151711744, 2 1/576460752303423488 x
2 1/576460752303423488, 2 1/1152921504606846976 x
2 1/1152921504606846976, 2 1/2305843009213693952 x
2 1/2305843009213693952, 2 1/4611686018427387904 x
2 1/4611686018427387904, 2 1/9223372036854775808 x
2 1/9223372036854775808, 2 1/18446744073709551616 x
2 1/18446744073709551616, 2 1/36893488147419103232 x
2 1/36893488147419103232, 2 1/73786976294838206464 x
2 1/73786976294838206464, 2 1/147573952589676412928 x
2 1/147573952589676412928, 2 1/295147905179352825856 x
2 1/295147905179352825856, 2 1/590295810358705651712 x
2 1/590295810358705651712, 2 1/1180591620717411303424 x
2 1/1180591620717411303424, 2 1/2361183241434822606848 x
2 1/2361183241434822606848, 2 1/4722366482869645213696 x
2 1/4722366482869645213696, 2 1/9444732965739290427392 x
2 1/9444732965739290427392, 2 1/18889465931478580854784 x
2 1/18889465931478580854784, 2 1/37778931862957161709568 x
2 1/37778931862957161709568, 2 1/75557863725914323419136 x
2 1/75557863725914323419136, 2 1/151115727451828646838272 x
2 1/151115727451828646838272, 2 1/302231454903657293676544 x
2 1/302231454903657293676544, 2 1/604462909807314587353088 x
2 1/604462909807314587353088, 2 1/1208925819614629174706176 x
2 1/1208925819614629174706176, 2 1/2417851639229258349412352 x
2 1/2417851639229258349412352, 2 1/4835703278458516698824704 x
2 1/4835703278458516698824704, 2 1/9671406556917033397649408 x
2 1/9671406556917033397649408, 2 1/19342813113834066795298816 x
2 1/19342813113834066795298816, 2 1/38685626227668133590597632 x
2 1/38685626227668133590597632, 2 1/77371252455336267181195264 x
2 1/77371252455336267181195264, 2 1/154742504910672534362390528 x
2 1/154742504910672534362390528, 2 1/309485009821345068724781056 x
2 1/309485009821345068724781056, 2 1/618970019642690137449562112 x
2 1/618970019642690137449562112, 2 1/1237940039285380274899124224 x
2 1/1237940039285380274899124224, 2 1/2475880078570760549798248448 x
2 1/2475880078570760549798248448, 2 1/4951760157141521099596496896 x
2 1/4951760157141521099596496896, 2 1/9903520314283042199192993792 x
2 1/9903520314283042199192993792, 2 1/19807040628566084398385987584 x
2 1/19807040628566084398385987584, 2 1/39614081257132168796771975168 x
2 1/39614081257132168796771975168, 2 1/79228162514264337593543950336 x
2 1/79228162514264337593543950336, 2 1/158456325028528675187087900672 x
2 1/158456325028528675187087900672, 2 1/316912650057057350374175801344 x
2 1/316912650057057350374175801344, 2 1/633825300114114700748351602688 x
2 1/633825300114114700748351602688, 2 1/1267650600228229401496703205376 x
2 1/1267650600228229401496703205376, 2 1/2535301200456458802993406410752 x
2 1/2535301200456458802993406410752, 2 1/5070602400912917605986812821504 x
2 1/5070602400912917605986812821504, 2 1/10141204801825835211973625643008 x
2 1/10141204801825835211973625643008, 2 1/20282409603651670423947251286016 x
2 1/20282409603651670423947251286016, 2 1/40564819207303340847894502572032 x
2 1/40564819207303340847894502572032, 2 1/81129638414606681695789005144064 x
2 1/81129638414606681695789005144064, 2 1/162259276829213363391578010288128 x
2 1/162259276829213363391578010288128, 2 1/324518553658426726783156020576256 x
2 1/324518553658426726783156020576256, 2 1/649037107316853453566312041152512 x
2 1/649037107316853453566312041152512, 2 1/1298074214633706907132624082305024 x
2 1/1298074214633706907132624082305024, 2 1/2596148429267413814265248164610048 x
2 1/2596148429267413814265248164610048, 2 1/5192296858534827628530496329220096 x
2 1/5192296858534827628530496329220096, 2 1/10384593717069655257060992658440192 x
2 1/10384593717069655257060992658440192, 2 1/20769187434139310514121985316880384 x
2 1/20769187434139310514121985316880384, 2 1/41538374868278621028243970633760768 x
2 1/41538374868278621028243970633760768, 2 1/83076749736557242056487941267521536 x
2 1/83076749736557242056487941267521536, 2 1/166153499473114484112975882535043072 x
2 1/166153499473114484112975882535043072, 2 1/332306998946228968225951765070086144 x
2 1/332306998946228968225951765070086144, 2 1/664613997892457936451903530140172288 x
2 1/664613997892457936451903530140172288, 2 1/1329227995784915872903807060280344576 x
2 1/1329227995784915872903807060280344576, 2 1/2658455991569831745807614120560689152 x
2 1/2658455991569831745807614120560689152, 2 1/5316911983139663491615228241121378304 x
2 1/5316911983139663491615228241121378304, 2 1/10633823966279326983230456482242756608 x
2 1/10633823966279326983230456482242756608, 2 1/21267647932558653966460912964485513216 x
2 1/21267647932558653966460912964485513216, 2 1/42535295865117307932921825928971026432 x
2 1/42535295865117307932921825928971026432, 2 1/85070591730234615865843651857942052864 x
2 1/85070591730234615865843651857942052864, 2 1/170141183460469231731687303715884105728 x
2 1/170141183460469231731687303715884105728, 2 1/340282366920938463463374607431768211456 x
2 1/340282366920938463463374607431768211456, 2 1/680564733841876926926749214863536422912 x
2 1/680564733841876926926749214863536422912, 2 1/1361129467683753853853498429727072845824 x
2 1/1361129467683753853853498429727072845824, 2 1/2722258935367507707706996859454145691536 x
2 1/2722258935367507707706996859454145691536, 2 1/5444517870735015415413993718908291383072 x
2 1/5444517870735015415413993718908291383072, 2 1/10889035741470030830827987437816582766144 x
2 1/10889035741470030830827987437816582766144, 2 1/21778071482940061661655974875633165532288 x
2 1/21778071482940061661655974875633165532288, 2 1/43556142965880123323311949751266331064576 x
2 1/43556142965880123323311949751266331064576, 2 1/87112285931760246646623899502532662129152 x
2 1/87112285931760246646623899502532662129152, 2 1/174224571863520493293247799005065242258304 x
2 1/174224571863520493293247799005065242258304, 2 1/348449143727040986586495598010130484516608 x
2 1/348449143727040986586495598010130484516608, 2 1/696898287454081973172991196020260969033216 x
2 1/696898287454081973172991196020260969033216, 2 1/1393796574908163946345982392040521938066432 x
2 1/1393796574908163946345982392040521938066432, 2 1/2787593149816327892691964784081043876132864 x
2 1/2787593149816327892691964784081043876132864, 2 1/5575186299632655785383929568162087752265728 x
2 1/5575186299632655785383929568162087752265728, 2 1/11150372599265311570767859136324175044531456 x
2 1/11150372599265311570767859136324175044531456, 2 1/22300745198530623141535718272648350089062912 x
2 1/22300745198530623141535718272648350089062912, 2 1/44601490397061246283071436545296700178125824 x
2 1/44601490397061246283071436545296700178125824, 2 1/89202980794122492566142873090593400356251648 x
2 1/89202980794122492566142873090593400356251648, 2 1/178405961588244985132285746181186800712503296 x
2 1/178405961588244985132285746181186800712503296, 2 1/356811923176489970264571492362373601425006592 x
2 1/356811923176489970264571492362373601425006592, 2 1/713623846352979940529142984724747202850013184 x
2 1/713623846352979940529142984724747202850013184, 2 1/1427247692705959881058285969449494405700026368 x
2 1/1427247692705959881058285969449494405700026368, 2 1/2854495385411919762116571938898988811400052736 x
2 1/2854495385411919762116571938898988811400052736, 2 1/5708990770823839524233143877797977622800105472 x
2 1/5708990770823839524233143877797977622800105472, 2 1/11417981541647679048466287755595955245600210944 x
2 1/11417981541647679048466287755595955245600210944, 2 1/22835963083295358096932575511191910491200421888 x
2 1/2283596308329535809693257551119191049120

foot off the camera in any direction, or have your subject look elsewhere than directly into the camera lenses.

Tungsten light is, on the whole, easier to handle than flash as the effect of light placement can be seen during the arrangement. The most adaptable tungsten lights for amateur use are the self-contained reflector floods and spots. These bulbs are inexpensive and may be used in any standard fixture. For their relatively short life they produce an extremely high lumen output of the correct color temperature for Kodachrome, Type A film. Because they are compact in themselves, they may readily be stored and carried, especially when used with lightweight collapsible light stands or clamp sockets. Tungsten light requires the intelligent use of a dependable exposure meter, both for the calculation of exposures and for establishing the desired ratio between key and fill-in lights (*top, right, page 72*).

Backgrounds for stereo portraits should be selected for color harmony. Textures in stereo assume real importance. A background rich with detail, such as a tapestry or a cabinet of miniatures would be confusing and usually undesirable in planar. In stereo, it may well add interest. But in such case the background should point up or complement the subject.

Among the more interesting stereo portraits are those where structural shapes, receding in depth, are used to advantage as backgrounds. The curves of a balustrade, an archway, a corridor, or a window not only add depth to the slide, but more important, place the subject in a familiar environment or a setting justified by association or artistic contrast.

Foreshortening, the evil gremlin that distorts the results in most amateur portraits by exaggerating the size of foreground objects, is not too serious a problem in stereo. It is caused by moving in too close to the subject with small cameras using short focal length lenses.

In stereo, we can make extreme close-up portraits if we arrange our subject so that nothing in the scene approaches too close to either edge of our framed picture. Our subject must be centered in the viewfinder, with ample space around him. The background in closeups should be kept absolutely plain—the sky an unpatterned flat surface.

If, for example, the subject is arranged with his elbows on a table which extends from edge to edge in our picture, the slide will be uncomfortable to view, even in an ultra-closeup mask. Also, if behind our sitter we have a patterned background of wallpaper or brick, though the camera will truthfully record

the subject in the foreground and the complete detail of the background, the slide will be unsatisfactory. It will be difficult to focus on both subject and background simultaneously. Why look for trouble? Keep the background plain in closeups and avoid disturbing elements on the edges. Foreshortening will be present in the slide, but only to the same degree that it is present when we look at the subject from the same range. It will seem quite natural.

Another difficulty which will be encountered when taking stereo closeups is exaggeration in depth. An example: In a full-face view of a person with a long nose, the nose tip will look much further away from the face than it really is. This distortion appears to some extent in hand viewers, but it is quite obvious in projection. So, to avoid such distortion, when we are photographing people with angular faces or long noses, we dare not come as close as we might to the round, cherubic face of an infant.

Thus we see that although stereo portraiture allows us a certain amount of freedom in posing our subject not granted to the planar photographer, distortion can occur and must be avoided. Stereo portraiture must therefore be attempted with an understanding of the problems and the will to overcome them if it is to be successful.—THE END

Naturally

FOR YOUR ALL-METAL PRESS CAMERA YOU WILL WANT...



All-Metal ALKON

LIGHTWEIGHT

CUT FILM HOLDERS

**STRONGER, THINNER AND MORE ACCURATE
THAN ANY WOOD OR PLASTIC HOLDER!**

Only All-Metal ALKON Holders Number
Your Negatives for Identification →

Made in sizes 2 1/4 x 3 1/4, 3 1/4 x 4 1/4, 4 x 5, and
5 x 7 to fit your Press or View Camera

At Your Dealer or Write for Descriptive Literature



ALKON PRODUCTS CORPORATION

698 EAST 142nd STREET, NEW YORK 54, N. Y.

PHOTO MART . . .

Atkinson
FOR THE FINEST
COLOR PROCESSING
EKTACHROME, ANSCO & EKTACOLOR PROCESSING
DYE-TRANSFER COLOR PRINTS

Write for prices or send film:
7273 Santa Monica Boulevard
Hollywood 46, California
Dept. A

Atkinson
LABORATORY

ALL
CLOSE-UPS
ARE FUN,
AND EASY

CAL-CAM FOCUS GUIDE
Works on all 35mm & Bantam cameras using a 2- or 3-Portra lens. Not only measures lens to subject distance, but frames subject just as you want it in the picture. Light weight, all metal, fully adjustable. Eliminates all guesswork—parallax trouble. Send make of camera.
Price (New Model).....\$9.95
U. S. Postage paid if cash with order, C.O.D. charges added. Calif. orders add 3% sales tax.

CAL-CAM — Dept. A
1564 N. Grand Oaks Ave., Pasadena 7, Calif.

Movie * **DUPLICATES**
* from your films
KODACHROME COLOR or BLACK & WHITE
Protect your valuable originals from projector damage and wear, run duplicate prints. Duplicate prints make wonderful gifts.
8mm or 16mm... Duplicates... 11c per ft.
8mm Enlarged to 16mm, or 16mm Reduced to 8mm... 14c per finished foot
* Mail us your original films with cash, check or money order, and we guarantee the BEST duplicate possible, QUICK SERVICE, TOP VALUE, SATISFACTION. Minimum Order \$3.00.
Hollywood MOVIE LABS, Dept. M
12522 Ventura Blvd., Studio City, California

LIGHTS OUT! HERE WE GO!
"Tex & Belle" Series
See your dealer or write direct. Sorry, no C.O.D.'s.
TITLE SLIDES, 1440 Broadway, N. Y. 18, N. Y.

35 MM DEVELOPING
INDIVIDUAL ATTENTION GIVEN EACH NEGATIVE
No mass production methods. Film fine grain dev. and vaporized to prevent scratching. 24 hr. service. Highest quality developing.
36 FULL SIZE 3 1/4 x 4 1/4 **\$1.50**
ENLARGEMENTS!
We Have Fresh Film!
8-12 & 16 REVELATIONS FROM 8 EXPOSURE ROLL, 500 OR 6 PRINTS 30V
UNIVERSAL PHOTO SERVICE
LaCrosse 22, Wisconsin

*** DYE-TRANSFER ***
COLOR PRINTS. Dye-Transfer print enlargements of your own favorite color films.
5x7 Print, from any make film, only \$2.50.
Duplicates of same 5x7 print, only \$1.25 each.
Write for complete price list or send film.
ROCHESTER PHOTO COLOR
Box 1623 Rochester, N. Y.

VIGNETTE LIKE A PROFESSIONAL!
with the NEW E-Z vignetter kit*
\$2.98 POST PAID
Get this kit and have fun turning out more interesting pictures than ever. Portrait, commercial and amateurs can have a hey-day accomplishing a number of unique montage effects with the E-Z Vignetter Kit. Adds a professional touch to portraits. No adjustments, fast, accurate. Set consists of 4 different sizes in durable plastic.
Send check or M.O. Prompt shipment assured.
ABEMAR PRODUCTS CO., 505 5th Ave., N. Y. 17
*Pat. Pend.

GUARANTEED COLOR KNOW-HOW
IS RIGHT HERE!
This truly great book has become the "Bible" of color shooters everywhere. Covers EVERY phase—easily understood by all. 150 B & W illustrations; 17 full color
GUARANTEED: If not satisfied after one year return for full refund. A real investment at \$7.50
Send for FREE Book Catalog

Camera Craft Pub. Co.
95-M Minna St., San Francisco 5, California

We Dare You . . .
to send us a color film that we cannot process! General Photo processes all foreign color films. Cost per roll is as follows: Dufaycolor . . . \$1.50; Agfacolor (negative and positive film), Ferrania-color, Fujicolor, Gevacolor, Ilfordcolor, Lumiere-color, Pakocolor, Sakuracolor, Telecolor, etc. . . \$3.50 per roll.
Prints from any positive color process can be made at the following costs: 2X or 2 1/4 x 3 1/4 size, 60c each; 3X or 3 1/4 x 4 1/4 size, 85c each; 4X or 4 1/2 size, \$1.50 each; 5X or 5 1/2 size, \$2.50 each, mounted; and 8X or 8 1/2 size, \$4.00 each, mounted. Prints from any negative color process range from 85c each for the 2 1/4 x 3 1/4 size to \$10.00 for 12x16 blow-ups.
All orders must be accompanied by payment for the complete job plus postage. Dealers will be awarded full dealers' discount.
GENERAL PHOTOGRAPHIC SUPPLY CO.
136-140 Charles St. Boston 14, Mass.

Sunset COLOR LAB
COLOR PRINTS
5x7 COLOR PRINTS 85c
(From 35mm only) ea.
Color Prints from any size transparency
2 1/4 x 3 1/4.....25c
3 1/4 x 4 1/4.....50c
5 x 7.....\$1.00
8 x 10.....\$2.00
Color Slides Duplicating.....25c ea.
COLOR PRINTS
11 x 14.....\$4.50 ea.
COLOR PROCESSING
35mm, 20 Exp. 120-620
\$1.00 Roll
Min. Order 1.50-No.C.O.D.

SUNSET COLOR LAB.
P.O. BOX 8595 • LOS ANGELES 46 CALIFORNIA

MALE PHOTOS for Artists & Sculptors.
DeLuxe Glossy originals.
10-8x10.....\$5.00; 5.....\$3.00
Sample.....\$1.00
18-4x6.....\$3.00; 10.....\$2.00
Three samples.....\$1.00
Ill. catalogue with each order.
Dr. Frank J. Thompson
919 N. 4th, Manhattan 2, Kan.

35mm Custom Quality FINISHING
KODAK ALBUM PRINTS
36 EXP. ROLL
\$1.50
Our nation-wide service, specializing in custom quality 35mm. developing (since 1939) guarantees you: Fine Work Done by Experts—Quality Materials—Individual Film Processing and Prompt Service.
35mm ROLL'S fine-grain developed and enlarged to 3 1/4 x 4 1/2.
KODAK ALBUM PRINTS IN NEAT FOLDER
36 EXPOSURES—\$1.50
20 EXPOSURES—\$1.00
REPRINTS—8c EACH
Developing, printing and enlarging of 8, 12, 16-exposure rolls and other sizes at equally low prices.
FAST SERVICE! All work completed and returned Via First Class Mail within 24 hours. Write for FREE: Mailing Bag and Price List, or send roll and money today.
FORMERLY MINIPIX LABS. BOX 973, DEPT. M, CLEARWATER, FLA.

COLOR PRINTS
From Your Transparencies
Electronically controlled for superb results. 3-day service and satisfaction guaranteed. Prints from any size transparency:
ANSKO COLOR KODACHROME EKTACHROME
4x5 5x7 8x10
50c \$1 \$2
2 1/4 x 3 1/4
Min. order \$1. No C.O.D.'s
PROCESSING: ANSCO & EKTACHROME Roll Film
24 hours—120-620, 35mm mtd. . . Only 90c roll
COLORFAX LABORATORIES
Dept. M-13, Box 3521, Georgetown Sta., Wash. 7, D. C.

America's Original 35MM Viewer
At better camera stores **\$3.50**
For 35mm, 16mm, 8mm Color Slides and strip film. Flippoint spiral focus. Greater magnification.
Order by mail if not available in your city. We pay postage.
Chromat-O-Scope
426 S. Spring St., Los Angeles 13, Calif.

FOR SAFER FLASH PICTURES ASK YOUR DEALER FOR A
CLIP-ON
QUICK - DETACHABLE FLASH SHIELD
5" Par. shield & diffuser \$1.95; with blue shield added \$2.75.
SPEAR PRODUCTS COMPANY
812 Huron Rd., Cleveland 15, O.

Specified by the Armed Services
For FREE illustrated folder on Synchron Flash see your dealer or write:
Dormitzer
Used by More Professionals Than any Other
ELECTRIC & MFG. CO., Inc.
5 Hadley Street Cambridge 40, Mass.

SAVE ON NEW 35 mm FILM
We use no movie short-ends, but only guaranteed, new, fresh, factory packed, frame numbered safety loaded film loaded by us in new type K. cartridges.
"PLUS-X" "SUPER-XX" "SUPREME"
20 exp. cartridges—3 for \$1.25
36 exp. cartridges—2 for \$1.25
"WE DO NOT SUBSTITUTE—WE SHIP WHAT WE ORDER"
When in Los Angeles visit our modern camera store on "the miracle mile."
THE DARKROOM
8370 Wilshire Blvd. Los Angeles 36, Calif.

LECO
• DEVELOPING: Fine Grain, by Inspection
• ENLARGING: Individual Attention
• COPY WORK: Black & White and Color
The Laboratory For Professionals And Advanced Amateurs
Demanding Quality Workmanship
Ask for Price List, Literature and Mailing Bags
Dept. P, 11 W 42nd St. N. Y. 18, N. Y. LA 4-2317

PHOTOMART

RELOAD YOUR OWN....!

NOT GOVT. SURPLUS FACTORY FRESH!

EASTMAN PLUS X

27 1/2 Ft. \$1.00 • 100 Ft. \$3.50

New! ANSCO 35mm COLOR

8 LOADS • 20 EXP. EACH

NOTCHED & TONGUED **BULK FILM \$8.49**

DAYLIGHT A.S.A. 12 TUNGSTEN

IN CALIF. ADD SALES TAX • ALL PRICES POSTPAID

PACIFIC COAST FILM CO. 1510 N. Sierra Bonita
Hollywood 46, Calif.

WALLET
SIZE

15¢

COLOR
PRINTS

COLOR FILM
PROCESSING

4" x 5" - 50¢

20 Exp. 35mm
Mounted, Roll . . \$1.00
Anso, Ektachrome
120 620, Roll . \$1.00
Slide Duplicating 25c ea.

2 1/4 x 3 1/4 25c
3 1/4 x 4 1/2 45c
5 x 7 1.00
8 x 10 2.00
Minimum Order \$1.50
No C.O.D.

CANYON COLOR COMPANY

P.O. Box 2036, Wilshire La Brea Sta., Los Angeles 36

De HYPO PRINT WASHER



Efficiency Plus for
Sink or Bathtub
Nothing to Rust or Break
Professional Results **\$2**
ONLY
(TAX INCLUDED)
At Better Dealers Everywhere

SPEED-EZ-ELS

Compact—No Adjustments
Easy Focusing—No Eyestrain
6 Popular Sizes—Budget Priced
Special Sizes on Request
At Better Dealers Everywhere
A. J. GANZ CO.
Hollywood 46, Calif.

Personalized PHOTO STAMPS 100 for \$2.00



Size (1 1/2 x 1 1/2):
100—\$2.00 200—\$3.00
Larger (1 1/2 x 1 1/2):
50—\$2.00 100—\$3.00

PHOTO SPECIALTIES CO.
1268 Madison Ave. New York 28, N. Y.

Perforated and gummed just
like a postage stamp, we re-
produce your picture on each
one. Wonderful way to pub-
licize your baby, wife, girl-
friend, business product or
service. Effective . . novel . .
inexpensive. Unique gift at
any time. Send photo and (if
possible) negative. All pic-
tures carefully handled and
returned. Satisfaction guar-
anteed. No C.O.D.'s. Send
check or money order to

PHOTO FILE

Complete Photo
Data Encyclopedia

Over 100 handy pocket size index
cards in a beautiful oak desk filing
box. The important data, compiled
from 50 photographic books, all con-
veniently at your finger tips. No more
thumbing through old books & mag-
azines to find the data you want. Cards
are cross-indexed and printed with
data charts, tables, diagrams on all
phases of photography. Easy to use
tool in the darkroom or when taking
the picture, carry the "Photo File"
data card with you. Always up to
date—Supplements issued regularly.
IDEAL GIFT—Shipped in gay gift
wrappings if you wish.

FREE Home trial for
10 days
Money back if not sat-
isfied.

Complete
File:
\$4.50
Postpaid

SEND NO MONEY: shipped C. O. D. if you wish (you pay postage)

STEINER ASSOCIATES, 310 South Baker, West Ave., Ithaca, N. Y.

Movies
Color
Lab Formulas
Photofood
Filters
Night Photos
Portraits
Flash
Close ups
Film Types
Enlarging
Kinks, Depth
of field
Construct
accessories
Strob lite
and many more.

24-HOUR SERVICE

36 EXPOSURE ONLY
35 MM FILM

Developed fine grain,
hardened. Each exp. en-
larged to 3 1/4 x 4 1/2,
glossy. 20 exp. - \$1.00;
Reprints - 5c each.

Free: SAMPLE PRINTS, PRICE LIST, MAILING PAGE

GRAPHIC PHOTO SERVICE

P. O. BOX 72, WILKES-BARRE
PENNA.

COLOR PRINTS by Premier

WALLET SIZE **25c ea.**

3 1/4 x 4 1/4 50c, 5 x 7 90c
4 x 5 75c, 8 x 10 \$2.00 2 1/4 x 3 1/4

To insure faster service, all orders shipped
First Class Mail

Color Processing
35mm 20 Exp.
Mounted, Roll \$1.00
Anso, Ektachrome
120-620, Roll \$1.00

Color Slide
Duplicating, ea. 25c
Min. Order \$1.00
No C.O.D.

Premier Color Co.

P. O. Box 8626
Cole Branch • Los Angeles 46, California



Photographic Studies

For the student of drawing
Series V vol. 1 Male Physique
Five 8x10 studies \$4.50
Send 25c for illustrated
brochure and sample print.

studio twenty-two
Box 72, Village Station
N. Y. 14, N. Y.

Model Release Forms

PROTECTS YOU FROM LEGAL TROUBLE **25¢**
for a pad of 25

Limit 4 pads to each.
No stamps, please

Modern Photography, 251 4th Ave., N. Y., N. Y.

Finer FOTO FINISHING

FASTER SERVICE. Your film processed
same day recd. Quality work. Encl. 50c
addl. for air mail return. Free mailing
bags. SATISFACTION GUARANTEED.

PHOTOCRAFT LABORATORIES
Department A-11 Post Office Box 13387
West Los Angeles Station • Los Angeles 25, California

SAVE 55%

16mm KODACHROME FILM

EASTMAN Type A
50' Magazine Load
Slightly Outdated

Regular List Price \$7.15
WHILE THEY LAST \$3.93

Additional 10% Discount on 10 Rolls

This film shows an expiration date of
AUGUST 1952. It has been reloaded in mag-
azines and is UNCONDITIONALLY GUARAN-
TEED. Processing by EASTMAN KODAK
included in price.

50' roll daylight spool pitch tested

(Type A) \$2.95

Dept. M-P-1

SEMLER'S ASSOCIATED PHOTO

11818 VENTURA BLVD. NO. HOLLYWOOD, CAL.

COLOR PRINTS

satisfaction guaranteed 3-day service
Minimum Order, \$1.00—No C.O.D.'s

COLOR PROCESSING	5x7 COLOR PRINT	COLOR PRINTS
Anso Color (Roll) 120-620-35 mm. (20 exp.) Mtd. \$1.00	from any size film 79¢	2 1/4 x 3 1/4—50c 3 x 4 1/2—70c (round corners)
Ektachrome (Roll) 120-620, Mtd. \$1.00	With every order totaling \$1.00	4 x 5—\$1.00 5 x 7—\$1.50 8 x 10—\$3.00 (mtd. in folder)

Morel Color Laboratories

(DEPT. M)
Penn. Ave. at Dahlem St., Pittsburgh 6, Penna.

GUARANTEED FRESH DATED PLUS-X Safety Film

20 exp. 35c • 36 exp. 55c
50 ft. \$2.00 • 100 ft. \$3.75

ARROW CAMERA EXCHANGE
464 East 96 St. Brooklyn 12, N. Y.

P&J COLOR PRINTS

8x10—\$1.50 ea.

From 1/2 35mm to 4x5 Trans.

COLOR FILM PROCESSING

2 1/4 x 3 1/4 . 25c ea.
3 1/4 x 4 1/2 . 50c ea.
4x5 . . . 75c ea.
5x7 . . . \$1.00 ea.
20 exposure (mounted) \$100
35mm 120-620 Anso & Roll
Ektachrome
Minimum Order \$2.00, No C.O.D.

P&J COLOR PRINTS

P.O. BOX 6575 • COLE BRANCH • LOS ANGELES

Custom FINE GRAIN Developing & Enlarging

THE ULTIMATE IN FINE
PHOTOFINISHING **35** PERSONALIZED
SERVICES

WRITE FOR FREE
DESCRIPTIVE FOLDER

STUDIO and SALON ENLARGEMENTS

MAKERS OF FINE
ENLARGEMENTS

Projection Print PHOTO SERVICE

P.O. BOX 87 UNIVERSAL CITY, CALIFORNIA

Verona Barbizon Frames

An attractive line with rich ornamentation in Gold
Bronze Finish or a blended White and Gold Finish.

For Photos	Each	For Photos	Each
14 x 17	\$4.85	24 x 30	\$7.50
16 x 20	\$5.00	24 x 36	\$9.00
22 x 28	\$6.50	30 to 40	\$10.00

Immediate Delivery. Also send for Free 72 Page Cata-
logue, with greatest values in Mounts, Albums, Frames
and Molders. International Sales Co., 414 E. Baltimore
Street, Baltimore, Md.

35 MM FILM REFILLS

Frame Numbered—in E. K. Metal Cartridges—not War Surplus
SAFETY FILM
E. K. PLUS-X

20 Exp. Cartridges 3 for \$1.00
36 Exp. Cartridges 3 for \$1.25
BULK FILM: 2—"55 ft." Rolls—\$3.50
HOLLYWOOD NEGATIVE SERVICE
Box 789 M Hollywood 28, Calif.

P H O T O M A R T . . .

STEDCO COLOR PRINTS

24-HOUR PROCESSING
COLOR FILM AND PRINTS
New Ansco Approved Type Vane Agitation Equipment

ROLL FILM 1.10
120 & 620
35mm (20 exp.) mounted

COLOR SLIDE DUPLICATING ea.
35mm Kodachrome & Ansco Color mounted. **20c**
Dealer Inquiries Invited

COLOR PRINTS
2 1/4 x 3 1/4 40c ea.
3 1/4 x 4 1/4 75c ea.
4 x 5 \$1.00 ea.
5 x 7 1.75 ea.
8 x 10 3.00 ea.
Min. Order \$1.00
No C.O.D.

YORK 0658 7669 Melrose, Los Angeles 46 Calif.

STEDCO PHOTO

WEST COAST COLOR HEADQUARTERS

ANSKO COLOR AND
EKTACHROME SPECIALISTS

Sensitometric Controls
One Day Service
Custom Printing
All Work Guaranteed

California Color

971 Howard St.—Dept. M
San Francisco 3, California
California's Oldest Color Finisher

NOW! EASIER SLIDE SELECTION



with the NEW
SELECTO-SLIDE
ONLY
\$3.95
POSTPAID

View 30 slides at once—all illuminated. Arrange your 35mm slides in proper sequence for easy speedy projection, and faster cataloging. Order your NEW Selecto-Slide Today.

HILLER DEVELOPMENT CORPORATION
311 California Street • San Francisco 4, California

ORDER NOW FOR CHRISTMAS

FLASHBULBS CAN EXPLODE!

USE

The BROOKS FLASHSHIELD is cheap insurance against accidents. Sells for \$2.25 at your camera shop. Blue filter for color work—50¢. Buy one today! Send postal card for interesting literature.

BROOKS MFG. CO., 1514 Aster Pl.
Dept. 25, Cincinnati 24, O.

BROOKS FLASHSHIELD

TERRIFIC SAVINGS ON FILM—'54 Date	
Kodachrome	B&W—ASA 50—Pan Reversal
8mm. roll \$3.20	8mm. roll \$1.00
8mm. mag. 3.75	16mm. roll 2.50
16mm. roll 8.50	16mm. mag. 1.75
16mm. mag. 5.75	16mm. mag. Kodak
35mm. K135 2.95	Sup. X—\$2.00
35mm. Ektachrome type—\$1.50	
35mm. Kodachrome reloads—20 exp.—\$1.95	

ALL FILM INCLUDES FREE PROCESSING
AWON FILM SUPPLY CO., 1140 B'way, New York 1, N. Y.

EVERY SHOT A CLEAR SHOT

with **HUGO** CAM-COUPLED
Meyer RANGE FINDER

—tailored to fit
your lens accurately.

At your dealer now
Meyer-Opticraft Inc. 39 W. 60th St., N. Y. 23, N. Y.

now title movies in SECONDS*

Self sticking CLINGTITE LETTERS stick on contact with glass, metal and all non-porous surfaces. No glue or adhesives! Letters re-usable! Title on locations; thru car window with subject as background; on mirror for 3-dimensional effect. Complete kit consists of 157 letters, numerals, figures; two title boards, 4-page idea booklet.

* with self-sticking CLINGTITE LETTERS

FREE OFFER: See how CLINGTITE LETTERS simplify titling. Write today for free samples and 6-page idea booklet. Send postcard with name and address, no obligation.

\$2.95

At leading dealers everywhere . . .

CLINGTITE letters

4844 S. Ashland, Dept. M3, Chicago 9, Ill.

NOW 20 EXPOSURE RELOADED CARTRIDGES 25¢

SUPER XX	PLUS X	DUPONT #2
20 EXP. 25c Ea.	36 EXP. 40c Ea.	
Bulk \$4.25 per 100 ft. — \$2.25 per 50 ft.		

NOTE: 20% Excise Tax must be added to price of B. & W. reloads

ANSKO COLOR RELOADS

20 Exp. Daylight or Tungsten (A.S.A. 12) \$1.25 Ea.

All fresh, clean safety film. Satisfaction guaranteed or money back. Please include 10¢ extra per order to cover postage and packing.

EASTERN PHOTO LABS, Dept. "B"
1405 N. Charles St. Baltimore 1, Md.

NEW 2" x 2" SLIDE PROJECTOR

Mansfield's Newest Photographic Sensation



with F.3.5
Gruenel Protak
PROJECTION
LENS
only
\$17.95
TAX INCLUDED

- Die Cast Design—Beautiful Crackle Finish
- Low cost 100 watt bulb delivers maximum efficiency
- New Thermo Cooling reduces heat, protects valuable color slides.

If Your Dealer Can't Supply, Write Direct
MANSFIELD INDUSTRIES, INC.
Dept. M, 1227 Loyola Ave., Chicago 26, Illinois

Finest Quality Ansco COLOR PRINTS

2 1/4 x 3 1/4 \$0.50	Dup. \$0.40
4 x 5 1.00	0.75
5 x 7 Mtd. 2.00	1.75
8 x 10 Mtd. 3.50	3.00

EKTACHROME AND ANSCO COLOR PROCESSING

EKTACHROME	ANSKO COLOR
120 & 620 Rolls 1.10	120 & 620 Rolls 1.00
3 1/4 x 4 1/44535
4 x 55040
5 x 78575
8 x 10 1.50	


Include 10¢ extra postage on all orders.

CUSTOMCRAFT

PROFESSIONAL PHOTOGRAPHIC SERVICES
Dept. MP P.O. Box 6618 WASH. 8, D. C.

35 MAGNIFIER

for Argus C3, C4 and Kodak 35 Cameras



- Magnifies the image as seen through the rangefinder.
- Makes it easier, quicker, more accurate to focus.
- Attaches in seconds, no tools necessary.
- \$3.95. Order by mail.

DeJay's PHOTO MART
4844 So. Ashland Ave. Chicago 9, Ill.

"BETTER PICTURES"

SINCE 1933
EXPERT FILM PROCESSING and VAPORATING
Quality Mail Order PHOTO FINISHERS

35mm --- \$1.80

35mm ROLLS developed, vaporated, individually enlarged—3 1/4 x 4 1/4—\$1.80. 20 exposure rolls—\$1.10. Extra enlargements 3 1/4 x 4 1/4—6c each. No. 127 split candid rolls—16 exposures—enlarged to 3 1/4 x 4 1/4—85c. No. 127 and 120, 18 exp. rolls enlarged to 3 1/4 x 4 1/4—85c. No. 120 or 620, 12 exp. rolls enlarged to 3 1/4 x 4 1/4—78c. No. 120 or 620, 16 exp. rolls enlarged to 3 1/4 x 4 1/4—85c. Extra enlargements—8c each. Postage prepaid in U.S.A. We will bring you mailer and complete price list.

We fine-grain all film and individually enlarge each frame. Quality work—prompt service. Send roll and money today.

BETTER PICTURES

2523 Lawrence Ave., Dept. M, Chicago 25, Illinois

8 X 10 COLOR PRINTS

All Orders Returned 1st Class

\$2.00

**ANSKO COLOR & EKTACHROME
ROLLS PROCESSED 120, 620, AND
35MM (Mtd.) \$1.00. 35MM DUPLICATES, 20c EA.**

NO C.O.D.'S—MINIMUM ORDER \$1.00
LO-PRICE COLOR PRINTS

2 1/4 x 3 1/4 30c	3 1/4 x 4 1/4 50c	4 x 5 75c	5 x 7 \$1.25
3 x 4 40c		8 x 10 \$2.00	

ACME COLOR PHOTO LAB.

Box 3004-M Linden Hills Station, Minneapolis, Minn.

'PIN-UPS'

By BERNARD OF HOLLYWOOD

A Portfolio of
BREATHTAKING BEAUTIES
Bernard's money-making work shop secrets revealed for the first time.


POPULAR EDITION \$1.25
68 large 11 1/2 x 14 1/2 pages Postpaid

GIANT DE LUXE EDITION \$3.00
132 pages with plastic binding

Send 25¢ for Sample Photos and Illustrated Literature.

A MUST FOR EVERY PHOTO FAN
ORDER YOUR COPY TODAY FROM
BERNARD OF HOLLYWOOD
Box 16961 MP, West Branch
Los Angeles 46, California

ENLARG-O-HOLDER for "VARIGAM" FILTERS



Fits lenses to 1 1/2" Dia. All metal — holds filter and diffuser.
Try ENLARG-O-HOLDER for positive aperture control. Fits aperture rings 1 1/2" to 2" diam. \$2.00 ppd. Money back guarantee on both. Free literature. Dept. J.
(Also professional sizes available)

\$3.00
POSTPAID

H. L. Instrument Co. 313 W. Valley San Gabriel, Calif.

Learn NEGATIVE RETOUCHING

Now for the first time in the history of Photography you can get a complete book on Negative Retouching—FULLY ILLUSTRATED—90 pages describing in detail HOW TO DO IT:
• Modeling • Spotting • Blending • Collecting • Proof Retouching • Etching • Commercial & Theatrical Retouching.

Plus a full set of paper negatives.
A full refund if returned in good condition in 5 days. Send for yours today.

\$1.95

DE GORE PHOTO PLAQUE CO.
Dept. XV, 3723 Fullerton Ave., Chicago 47, Ill.

DEEPSTER

TWO FULL-LENGTH
DEEP TANKS FOR
DEVELOPING 35mm
TO 620 ROLL FILM.



TANKS STORE DEVELOPER & FIXER OR FOLD UP WHEN EMPTY.
Send only \$6.95 for complete set of two tanks with wall brackets, film clip and light-tight caps.

Box 905
GLEN CAMERA PRODUCTS Sea Cliff 2, N. Y.

121

Classified Ads . . .

Classified Want Ads may be inserted in MODERN PHOTOGRAPHY by any reliable individual, camera dealer, or specialty house. Terms: 40c a word. Each word, including each item in the address, counts as one word. Send cash with order. 5% discount for 6 consecutive insertions. Forms close on the 1st of each month.

cameras, equipment for sale

DISCRIMINATING AMATEURS ONLY. After you have tried everyone else, prescribe completely your requirements for super-fine lenses and cameras.

Not capitalizing on confusion! Principally serving the experts, Jay offers prompt, personal, and understanding service to you who desire super-fine equipment and appreciate extra effort plus square dealing. No postcards!

JAY REED, CHROMOPTICS, 1012 Rush near Oak, Chicago 11, Illinois.

SPECIALISTS IN BUYING—and selling top German cameras in top condition, unusual lenses and accessories; ask the man who knows: **JAY REED, CHROMOPTICS, 1012 Rush, Chicago 11, Illinois.**

ASK THE MAN WHO KNOWS: JAY REED, CHROMOPTICS, 1012 Rush, Chicago 11, Illinois.

GOOD THINGS COME IN SMALL PACKAGES—no illusionary bargains, no housework for any products not worth the price.

Visit the smallest, complete camera store in the world for ethical, no-pressure advice. **LOWEST OVERHEAD** permits **HIGHEST BUYING PRICES** and **LOWEST SELLING PRICES** for **FINEST LENSES** and **CAMERAS**. Convenient to Drake, Ambassador, Knickerbocker, Allerton, and many other top hotels. **CHROMOPTICS BY JAY REED, 1012 RUSH, CHICAGO 11.**

FREE INSURED DELIVERIES! COMPARE—ANSKO REFLEXES, SYNCHRONIZED, COATED F3.5, CASE, LIKE NEW, \$105.00; WITH HEILAND SYNCHRONIZATION \$115.00, DELIVERED. LATEST NEW M-X IKOFLEXES WITH F3.5 TESSARS, \$140.00; LATEST ROLLEIFLEXES IN STOCK, KINE EXAKTA VX'S WITH PRE-SET f2.8's, some demonstrators, best trades, lowest overhead. CHROMOPTICS BY JAY REED, 1012 RUSH, CHICAGO 11.

7" F2.5 coated Aero Ektar in barrel, like new \$125.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

Bellows for Kine-Exacts with 105mm F4.5 coated Steinheil in short mount, perfect answer to your close-up and telephoto problems at one low price, new \$60.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

3.5cm F2.8 coated Schneider Xenogon wide angle coupled for Leica, uses same filters as Summaron, new \$95.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

200mm F4.5 Coated Telyt with Mirror Reflex Housing, for Leica, fect, Leitz certificates, brand new \$258.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

GE PR-1 memory meters, \$20.55 . . . Weston Master II's, \$19.98. Factory boxed originals. Free Catalog. DEALER'S MART, Dept. M1, 11 Willard Ave., Mt. Vernon, N. Y.

Guaranteed and proven quality service—money back guarantee on mail orders—We prepay shipments! Kodak 35, coupled rangefinder, flash, \$43.00. Bolex B2, case, \$52.00. Argus C3 outfit, excellent, \$44.00. Agfa Karat, coupled rangefinder, f2.8 Xenar, \$34.75. Retina II, f2 coated Ektar, \$88.50. Contessa, f2.8 Tessar, \$124.00. Contax II, f2 Sonnar, \$138.50. Contax IIa, f2 T-coated Sonnar, \$258.50. Karmot, coupled rangefinder, f2 Xenon, case, \$109.00. Vogtlander Prominent, f1.5 latest, \$234.50. Leica our specialty—all models, new and used! Leica III, f2 Summar, \$118.50. Leica III, f3.5 Elmar, \$114.00. Leica IIIa, f2 Summar, \$128.00. Leica IIIc, f3.5 Elmar, \$142.00. Leica IIIc, f2 Summar, \$188.00. Leica IIIf's-IIIIf's immediate delivery! 35mm coated Elmar, \$69.50. 90mm coated Elmar, \$77.50, excellent. New Leitz Focomat 1c enlarger \$147.00. We have the Leica accessories you want! Hasselblad camera f2.8 Ektar, spotless, \$364.00. All Hasselblad accessories in stock! West Coast Headquarters for Hasselblad! New Master Reflex II, f2.8 Tessar, preset, \$218.00 Special! Latest Rolleiflex, f3.5 Tessar, new—\$285.00. Like new, \$200.00. Spotless, \$225.00. Latest Reiflex, f3.5 Xenar, new \$265.00. Spotless, \$194.00. Rolleiflex, f3.5 Tessar, \$119.50. Ansco Automatic Reflex, flash, \$116.00. National Graflex, \$48.00. Ciroflex D, \$55.00. Ciroflex B, \$39.50. 6 x 9 Ihagee, f4.5, coupled rangefinder, \$42.00. 6 x 9 Vogtlander Berghel, f4.5 Heliar, \$48.00. 2 1/4 x 3 1/4 & 4 x 5 Linhof in stock for immediate delivery. Linhof tripods, Linhof accessories! 10" Graflex, Tele Optar, \$72.00. 300mm f5.5 Tele Xenar, \$59.50. Bolex H-8 Deluxe, 3 lenses, accessories, \$295.00. Bell & Howell 16mm Automaster, 3 lenses, case, \$264.00. Season's Greetings and Best Wishes to all our friends! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

Medalist II, coated F3.5 Ektar, spotless \$175.00; Altman's, 64 E. Monroe, Chicago 3, Ill.
LEICAS, LEICAS, LEICAS, and more LEICAS, Altman's, 64 E. Monroe, Chicago 3, Ill.

Retina II-a, coated F2 Xenon, M-X sync, fect, spotless \$125.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

Rolleicord III, coated F3.5 Xenar, case, spotless, \$120.00; Altman's, 64 E. Monroe, Chicago 3, Ill.

Don't buy until you get our price on any brand-new Still or Movie Equipment—also Home Appliances. Send card for lowest price on any item. Highest allowances for used equipment and home movies. Imperial Enterprise Inc., 34 Park Row, New York, N. Y.

Royal Quiet DeLuxe Portable typewriters, NEW, \$76.83. Free Catalog, 1001 bargains. DEALER'S MART, Dept. M1A, 11 Willard Ave., Mt. Vernon, N. Y.

WHOLESALE Photographic Supplies. Films, Cameras, Projectors, Enlargers. Write for FREE CATALOG. CAPITOL PHOTO SUPPLIES, 2428 Guadalupe, Austin, Texas.

YOU need the best equipment if you want professional results. Alpa Prisma Reflex, the superb 35mm, the new Robot Star that uses standard cartridges, Bolex 35mm or Nikon with F1.5 lens. Or Rolleiflex Automatic for larger size pictures. For the best in moviemaking, the Pathe Super 16 will make you happy. Highest trade-in allowance. All item brand new. Panhandle Cameras, Scottsbluff, Neb.

20 to 40% discount on factory sealed cameras, Projectors, Recorders. Send us your needs. Dart Co., 3812 Atlantic Ave., Brooklyn 24, N. Y.

100 POWER telephoto lens. 500mm fl. for all cameras with focal plane shutters. \$5.00. Telescope Camera Co., Manorville 3, N. Y.

wanted to buy

IMMEDIATE Airmail Payments for precision cameras, lenses, all types; Specialists in German equipment; Jay Reed, Chromoptics, 1012 Rush near Oak, Chicago 11, Ill.

Leicas and Leica lenses, URGENTLY NEEDED, cash by airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

URGENTLY NEEDED: Bantam Special, Contax, Ektra, Foto, Hasselblad, Kine-Exakta, Leica, Linhof, Medalist II, Nikon, Retinas, Rolleiflex (Pacemaker and Crown) Speed Graphics, Super Ikontas, send in, or write for offer, immediate reply, cash by airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

Pacemaker Speed Graphics, URGENTLY NEEDED, cash by airmail; Altman's, 64 E. Monroe, Chicago 3, Ill.

Crown Graphics, URGENTLY NEEDED, cash by airmail; Altman's, 64 E. Monroe, Chicago 3, Ill.

LENSES, AERIAL CAMERAS, MOTION PICTURE CAMERAS, CASH AIRMAILED IMMEDIATELY FOR THESE AND AERIAL LENSES, INCLUDING 7" AEROEKTARS, 20" and 40" BAUSCH AND LOMB, ETC. SHIP INSURED OR WRITE. Gordon Enterprises, 5362 N. Cahuenga, North Hollywood, Calif.

CASH FOR CAMERAS. We need fine cameras Leica, Contax, Rolleiflex, etc. Send to us for inspection. Cash by return mail. Standard Camera Supply Co., 7901 Santa Monica Blvd., Hollywood 46, Calif.

LEICAS, Leicas, Leica! All Leica accessories—Wanted immediately! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

BONUS for: Hasselblad, Ektra, Contessa, Retina, Bantam Special, Contax, Medalist II! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

BONUS for: Kine-Exactas, Leicas, Stereo Realist, Rolleiflex, Rolleicord, Graphics, Bolex, Bell & Howell! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

HIGHEST cash air mailed immediately! All types fine cameras, lenses, equipment! Prompt, courteous service! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

camera registration

STOP THIEF! STOP TRAFFIC IN STOLEN CAMERAS! Protect yours with lifetime registration for only one dollar.

Request registration forms now, stating how many cameras and lenses you own. **NATIONAL CAMERA REGISTRY, 67 E. Oak, Chicago 11.**

camera repairs

SPECIALISTS in Foreign and Domestic camera repairs. Lens polishing, re-cementing, re-focusing, Bellows installed. Rangefinders repaired, sync. Repairs guaranteed up to one year. **Chicago Camera Specialists, 17 N. State St., Chicago 2, Illinois.**

Foreign cameras: Six years with the inventor of the Contax (Zeiss) assure you 100% repairs on most foreign and domestic cameras. Internal synchronization installed on Contax, Leica, Rollei, Ikonta, etc. All work guaranteed and conscientiously done. **Strauss, Photo-Technical Service, 930 "F" Street, N. W., Washington, D. C.**

COMPUR, Wollensak, Graflex, Supermatic, Ilex, Leica, Prontor, Argus and Robot Shutter Repair Service a Specialty (Prompt 24 Hour Service). CENTRAL STATES CAMERA REPAIRS, 3116 E. Douglas, Wichita 8, Kansas.

For Discriminating Camera Owners. In need of repairwork? Then your camera demands the best of care and the services of our highly skilled and most fastidious repairmen. We offer you only discriminating service plus highest quality workmanship. **Reliable Camera Servicing, Room 211A, 6349 N. Western Ave., Chicago 45, Illinois.**

photo finishing

PHOTOMURALS. Any size, 3 feet up. Your own negatives or hundreds of our pictures to choose from. **Catalog 25c. Photomammoth Murals, 12048 Vanowen Street, Dept. P, North Hollywood, Calif.**

Retouching, Dyeing, Etching. Q. W. Piper, 2103 Lawrence Ave., Chicago 25, Ill.

Professional Retouching for professional photographers. Prompt service. **K. George Retouching, 11242 Covello Street, Sun Valley, California.**

AGFACOLOR negative, positive, processed \$2.00. Movies processed. Continental Laboratories, Box 44, San Francisco 1, Calif.

ENLARGEMENTS, CUSTOM MADE. IMMEDIATE SERVICE. B&W or warrentone. DOUBLE-WEIGHT Glossy, Semi-matte, Silk, Matte, Tapestry, 5x7, 25c; 8x10, 40c; 11x14, 80c; 16x20, \$1.75. New Negatives, 50c. COMPLETE SERVICE, including Retouching, Hand Oil Coloring, Print Toning. PHOTO ENLARGING SPECIALISTS, 1476 Seabury Place, New York 60, N. Y.

EKTACHROME AND ANSCO color film processing. 24 hour service. 120 & 620, \$1.00; 35mm. 20 exposure mounted, \$1.25. Cut film 6 sheets, \$2.00. Please include return postage. AXEL BAHNSEN COLOR LABORATORY, 17 Glen Street, Yellow Springs, Ohio.

NO NEGATIVE? Send \$1.00 for new negative and two 5x7 enlargements from picture, transparency, colorprint, polaroid, stereoframes. Inquire movieframe enlargements, 2x2 slides from any negative, photograph, colorprint. Curio Photo, 1187 Jerome Ave., New York 32.

Free Sepia Enlargement of your color slide. Returned, Western Photo, P. O. Box 91, San Diego 12, Calif.

let's trade

We have no trades this month, but should by the next issue or two. Do you have any piece of equipment you would like to trade? Chances are you can get an excellent exchange with another reader. Send us your copy, together with check or money order paying 40 cents for each and every word. If it is received by the end of the month, it will appear in the issue of the second following month.

movies, movie film

KODACHROME MOVIES—projection sample \$1.00—SOF rentals, lists 10c; colorslides—views 10—\$1.00, art glamour 3—\$1.00, lists, sample 35c. **Galloway Films, Box 6953E, Washington 20, D. C.**

CARLSBAD CAVERNS. The Antarctic, Pitcairn Island, others. 8mm-16mm Home Movie Travels. Carlsbad Caverns sample color film \$1.50, specify 8mm, 16mm. Catalogue 5c. **"TEX" HELM, Dept. MMCA, Carlsbad, N. M.**

FREE CIRCULARS—listing our bulk movie film, chemicals, developing sets, and instructions on developing movies. **Fromaders, Box 637G, Davenport, Iowa.**

EXCHANGE 8mm 50c reel. Mason, 4801 Riviera, Coral Gables, Florida.

HUNDREDS of Subjects! Travels, Comedies, Adventure, Musicals, Etc. Best Movie Headquarters of ALL! Catalogs 15c. Turke Films, Hinsdale 2, Ill.

EDENART has all subjects. Send 25c for complete listing and sample. State subject preferred. EDENART, Box 608, Woodmere, L. I., New York.

BIGGEST 16mm-8mm BARGAINS! New 1-reel, 16mm, sound releases (300'), \$21.95 plus 25c postage; 10-reel, 8mm, (150'), \$2.98 plus 15c postage. New titles each month. Used 1-reel, 16mm sound prints as low as \$3.98; 1-reel, 16mm silents, \$2.98; 1-reel, 8mm, \$1.98. Good used 16mm sound projectors—Ampros, Bell & Howells, Victors—frequently available at \$129.95. Blackhawk's free monthly catalog lists hundreds of bargains in films, supplies and equipment. Blackhawk Films Inc., 1618 Putnam Bldg., Davenport, Iowa.

1953 Rose Parade Movies, Kodachrome. Colorful floats! Beautiful girls! 16mm 200' \$34.95. 8mm 100' \$17.50. C.O.D.'s accepted. California add tax. Avalon Daggett, 441 North Orange Drive, Los Angeles 36, California.

MOVIE CLASSICS, 8MM—16MM. Send Stamp. 6721 Walnut, Merchantville, N. J.

DO YOU OWN A MOVIE CAMERA? If so, you positively cannot afford to be without Solar's free list of camera film and lab services. Tells you how to save \$\$\$\$\$\$ by loading your own 8mm or 16mm camera spools or magazines with color and black and white film. Custom Titles (made to your order) B & W and Full Color, lowest price in the country, 3 for \$1.49... write now! SOLAR, 4246 South Kedzie, Chicago 32, Illinois.

Sound 16mm Army-Navy Training Films Incomplete. Assorted. No list of titles. New low prices. 400 ft. \$1.49, 800 ft. \$2.75, 1200 ft. \$4.25. CINE LABORATORY, P. O. Box 720-M, Chicago 90, Ill.

GUARANTEED FRESH 8mm roll, magazine; 16mm roll, magazine movie films. Color, B&W. Free catalog. ESO-S, 47th Holly, Kansas City 2, Missouri.

MALE ACTION and posing shots of Mr. America and other perfectly developed men. All close-ups. 60 ft. 8mm—\$3.50, 120 ft. 16mm—\$6.00. Dr. Frank Thompson, 919 4th, Manhattan, Kansas.

WE HAVE IT! Send 10c for special listings, and sample film strips. Reyelle, Box 12, Dept. M, Hammels, N. Y.

SAVE 50c on Double 8mm or 16mm roll movie film, with 24-hour processing service. Free Circulars. Fromaders, Box 637-G, Davenport, Iowa.

5,000 NEW—USED 8-16mm Silent—Sound Films. International-D, 2120 Strauss, Brooklyn 12.

Free Catalogue. New entertaining 8 and 16mm sound film now available. Box 14, Midtown Station, New York City.

photo jewelry

Mount your photos into pins, earrings, tieclaspers, etc. Amazing possibilities. Send 10c for illustrated brochure and complete information. Milady-Fair Co., GPO Box 1328, NYC 1.

color slides

Miami, Havana, Bahamas. Kodachromes \$2.50 per dozen. Free catalog. JACKSON'S CAMERA STORE, 60 West Flagler Street, Miami, Florida.

60,000 SLIDES IN STOCK insures quick delivery. Cover United States, Europe, England, Holy Land, Japan, China, Philippines, Cuba, West Indies, Mexico, etc. If you visited Washington or Williamsburg you saw RoLoc slides on display. Product Captain M. W. Arps, USN, retired. Catalog, 3c. RoLoc, Box 1715, Washington 13, D. C.

STEREO "REALIST SIZE" Color Slides Carlsbad Caverns. Sample 75c. Catalogue 5c. "TEX" HELM, Dept. MSR, Carlsbad, N. M.

LARGEST SELECTION Rocky Mountain region. Approval service insures satisfaction. Nesbit's, 711 Columbia Road, Colorado Springs 10.

COLORSLIDES, Travel, nature, etc. Free list. Sample 30c. Kelly M. Choda, Box 5, Los Alamos, New Mexico.

FREE LISTS—sharp, true-color 2 x 2 Kodachromes: famous places, tourist attractions, flowers, animals, etc. Dept. M. The EULO Company, Box 178, Denver 1, Colo.

CARLSBAD CAVERNS—More New Interior Color Slides added. Sample 50c... New Illustrated Catalogue with text 15c. "TEX" HELM, Dept. MPICS, Carlsbad, New Mexico.

Comic Color Slides for your approval—Western Photo Slides, Box 1112, Santa Monica, Calif.

Stop searching! Color slides as you like them, 4 for \$1.00, 10 for \$2.00. Exclusive offerings free with orders only. Danny Davis, Box 1202, Room 165, Chicago 90, Illinois.

KODACHROME Slides. Sample 30c. Kirwin Slidefilm Laboratory, CRYSTAL LAKE 1, Illinois.

WEST VIEW Kodachrome Slides on approval. These professionally photographed slides truly capture the natural scenic beauty of our Western Wonderland. Unequaled detail, composition, and color reproduction. Lowest prices for slides on Kodachrome film. Determine the quality of West-View slides before purchasing. Send for catalog and a "Slide Tour" (18 slides and text) on approval. Indicate the Western National Park preferred. No minimum purchase. West-View, Dept. M, 1518 Montana Ave., Santa Monica, California.

NATURAL color, 2 x 2 slides. Hollywood's best posed by the master. 4 for \$1.00, 10 for \$2.00. Perry Pelton, Box 5967, Dept. 14, Chicago 7, Illinois.

SLIDES OF THE EAST. Cape Cod, White Mountains, Lexington, Plymouth, Niagara, Ausable Chasm, Santa's Workshop, Quebec, Montreal, Gaspé, Fall Foliage, Covered Bridges, Historic Houses, many others. Send for catalog beautiful kodachromes by Henry Cobb Shaw, 8-2 Bosworth St., Boston 8, Mass.

BEAUTIFUL KODACHROMES California Coast, Missions, Festivals, Flowers, Sequoia, Ghost Towns, Yosemite, Death Valley, Hoover Dam, Las Vegas, Mexico, San Francisco, San Diego, Glass Church, Spain, Alaska, Finland. Three Slides \$1.00. REDFIELD COLOR SLIDES, 676 Buchon Street, San Luis Obispo, California.

HAVE YOU SOMETHING YOU'D LIKE TO SELL, BUY OR EXCHANGE DIRECTLY WITH ANOTHER READER?

You'll be surprised at how fast one of our readers will do business with you! Old cameras, lenses, projectors, or any piece of equipment will find a ready buyer or seller. Ads received by the end of month will appear in the issue out the second following month. Remittance, at 40c for each and every word, must accompany ad. Send to Miss Goodstein, Modern Photography, 251 Fourth Ave., New York 10, N. Y.

CUSTOMCOLOR prints, Film processing, price list. Box 67, Nederland, Texas.

WORLDWIDE—Stereo or 2 x 2. Four samples and literature \$1.00. Dave Harris, 2401 Pittsburg, El Paso, Texas.

BEAUTIFUL MAINE COAST Scenes. New Hampshire, Hudson Valley, Montreal, Halifax. Lists and 3 samples, \$1.00. Maine Photos, Box 1622 D, Portland, Maine.

EDENART has all subjects. Send 25c for complete listing and sample. State subject preferred. EDENART, Box 608, Woodmere, L. I., New York.

WE HAVE IT! SEND 10c for special listings, and sample slide. Reyelle, Box 12, Dept. M, Hammels, N. Y.

STEREO FANS ! ! ! Stereo slides galore—also New Precision Stereo Viewer—\$2.95. 10 Academy Award Winning Stereo Slides—\$3.95. Stereo Lockslide mounts, mounting service—Send 25c for complete catalog & sample slide. Horner-Colley Prod., Inc., 6356 Hollywood Blvd., Hollywood 28, Calif.

COLONIAL PHILADELPHIA, VALLEY Forge, Etc. Sample LIBERTY BELL and lists 35c. Colonial, 343, Swarthmore, Pa.

GENUINE OIL PAINTING—Portraits or scenery beautifully painted from your color-slide or print, write—Artafact Studios, East Peoria, Illinois.

YELLOWSTONE—Kodachrome Projection Movie \$1.00. Ten Colorslides \$1.00. Catalogue 10c. EDDINGS, 32-M Roberts, Corning, N. Y.

BEAUTIFUL COLOR SLIDES 10c each. Send dime for sample and latest issue "Slide News". SLIDE SUPPLY, Box 1031, Canton, Ohio.

VIEW OF GREENFIELD VILLAGE, home of Henry Ford's collection of famous buildings, are now available in a set of eight 35mm natural color slides, at only \$1.95. Order this set and Weston's complete free list from your dealer, or write Weston's Travel, 2818 North Piedras, El Paso, Texas.

HUMOROUS old Time color slides for home projection. Illustrated Catalog Free. Universal, Box 629M, Beverly Hills, Calif.

Special selections of Grand Canyon, Glacier, Yellowstone, Yosemite on approval. Other Western National Parks, Mexico, Banff & Jasper available. Douglas Whiteside, Yosemite, Calif.

EXCLUSIVE interiors—historic buildings, museums, caves. Free list. Keller Color, Clifton, N. J.

Unusual Pin-Ups, Most sensational collection in the world! Twelve NEW sets. Eight glossy 4 x 5 Photos to set \$2.00. Five color slides to set \$2.00. 8mm 50 foot movies \$3.00. BERNARD, BOX-C, Beverly Hills, California.

photos, b & w slides

2x2 SLIDES from any size negative. Mounted. 15c each. Miller Slide Service, Holdrege, Nebraska.

BEAUTIFUL Southern models. 6 artistic photos \$1.00, 15 for \$2.00, 40 different \$5.00. Completely guaranteed. Oakley & Wooten Studio, Gallatin, Tenn.

DRUM MAJORETTES, 32 Glossy Photos \$1.00. Frederick Forman, 868 Lorimer, Brooklyn 22, N. Y.

OUTSTANDING MALE PHOTOS—Powerful... Superbly Posed! Eight 4 x 5" Photos \$2.00. FREE Gift with each \$2.00 order. T. C. Dilbeck, Dept. N-3, Box 19007, La Tijera Station, Los Angeles 43, California.

MALE PHYSIQUE PHOTOS—Exclusive Originals. Eight 4x5" photos \$2.00. Free Gift with each order. Terry Thorne, Dept. MX, P. O. Box 15535, Crenshaw Station, Los Angeles 8, Calif.

B&W TRANSPARENCIES. Single frame strip 4c. Single frame mounted 7c. Double frame mounted 8c. Optical reductions from larger negatives mounted 13c. Kirwin Film Laboratory, Crystal Lake, Illinois.

U. S. NAVY OFFICIAL WAR PHOTOGRAPHS. A collection of Navy, Marine Corps and Coast Guard photos compiled by Captain Edward Steichen, \$1.00. Book Department, MODERN PHOTOGRAPHY, 251 Fourth Ave., New York 10, N. Y.

Male Action Photos for artists and sculptors. Catalog Number One consists of 15 photos of four different young models. Send \$1.00 to Richard Roscoe, P. O. Box 4249, San Francisco 1, California. Kindly send this ad with order.

50 ENGLISH MODELS in artistic Figure, Ballet, Pinup-poses. Also: illustrated Art Photography Courses. Send 1-3-5 Dollars for Samples, Prospectuses, Lists. Studio Jordan, 17, Cheyne Close, London, N.W. 4, England.

KOREAN Natives. Excellent human interest photos. 6 quality prints \$1.00, 15 different \$2.00. Guaranteed. Oakley & Wooten Studio, Gallatin, Tenn.

stereo photography

Stereo for any camera, complete, nothing more to buy. Send \$1.00 to TRU-DIMENSION, Box 1112, Santa Monica, Calif.

STEREO SLIP-IN MOUNTS only \$4.20 per 100. STEREO VIEWER superb construction, \$3.75. Satisfaction guaranteed! DuBois, 5864 Hollywood, Hollywood 28, Calif.

STEREO LOVERS: 10 interesting slides for \$1.00 and 10 of your old slides. After list trade, price is \$1.00 for 20 slides. Hank Blum—221 Tompkins Avenue—Brooklyn 16, N. Y.

STEREOLUSIONS—Imaginative Stereo Realist color slides. Tricks, multiply exposures, strobe effects, close-ups, etc. Factual, creative, whimsical. Descriptive brochure free. Fabulous "Ridiculous Cowboy" example slide seventy-five cents. Dimensional Enterprises, 4063 Radford Avenue, Studio City, California.

"FREE VISION" stereo. See depth unaided with any stereo pair, instructions, materials, \$1. Norona Photos, Kingwood, West Virginia.

agents wanted, salesmen wanted

BUY Wholesale—25,000 items. Catalogue 25c. Matthew, 1474-C4 Broadway, New York City.

schools and instruction

PHOTOGRAPHY for pleasure or profit. Learn at home. Practical basic training. Long established school. FREE booklet, American School of Photography, Dept. 1112, 835 Diversey Parkway, Chicago 14, Ill.

OIL COLORING PHOTOGRAPHS can be a fascinating hobby or a profitable sideline for those with artistic talent. Learn at home. Easy simplified method. Send for free booklet. National Photo Coloring School, 835 Diversey Parkway, Dept. 212C, Chicago 14, Ill.

miscellaneous

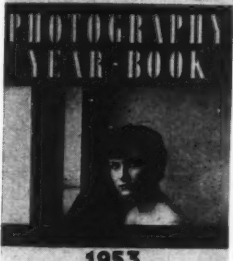
MODELING Unmasked. 15,000 word exposé of photographers' agents' schemes: trick mirrors, call girl rackets, test photos, etc. Authentic. \$1.00. Dept. P, Knight Press, 524 W. 25 St., N. Y. C.

Modern PHOTOGRAPHY'S Book Store

After a careful selection of current photographic books, we recommend the following to our readers. If you don't see the book you want, query us anyway. Chances are we can get any in-print, photographic title you want.

SPECIAL OFFER

On any order for \$20.00 or more we shall be glad to include, at no charge, a one-year subscription in Modern Photography. Just circle the word SUB in the coupon below.

161 PHOTOGRAPHY YEAR-BOOK

1953
PRIZED INTERNATIONAL PHOTOGRAPHS ON HANDSOME DISPLAY
 Edited by **HAROLD LEWIS**
 (Published in Great Britain)
 Clothbound
\$6.00
 per copy

ANNUALS

- 1 Universal Photo Almanac**
 1952 Edition selling out fast. **\$1.75**

COLOR PHOTOGRAPHY

- 127 Natural Color Processes by C. E. Dunn**
 All information needed to produce color prints in any of the processes now in use. **\$5.00**

- 9 How to Expose Ansco Color by Moen**
 Who has worked with color for 29 years and who tells how to get the best out of each shot. **\$3.00**

13 MAKING BETTER COLOR SLIDES
 by Fred Bond

 Answers the questions every slide maker wants to know. Simple non-technical books by top man in this field. Two books, Part 1 and Part 2.
EACH \$3.50

COMPOSITION

- 84 The Model by Wm. Mortensen**
 Figure work and portraiture: Direction and posing of model, etc. **\$5.50**

DEVELOPING AND PRINTING

- 21 Mortensen on the Negative**
 How to make perfect negatives, an exhaustive treatment. **\$5.00**

ENLARGING

- 160 Bigger and Better—The Book of Enlarging by Don D. Nibbelink**
 From start, to finished print, by an Eastman Kodak Technical Editor. **\$2.95**

FLASH PHOTOGRAPHY

- 39 Flash in Modern Photography by Mortensen**
 What to do with it, how to do it, mistakes to avoid. Emphasis on portraiture, synchro sunlight figure work, etc. Profusely illustrated. Diagrams. **\$5.00**

GENERAL PHOTOGRAPHY

- 38 Feininger on Photography**
 The last word on how to make, rather than take superior photographs, by the distinguished "Life" photographer. **\$6.95**

MINIATURE CAMERA PHOTOGRAPHY

- 79 35mm Photo Technique by H. S. Newcombe**
 Answers every question you're likely to have. **\$4.75**

- 76 The Bolsey Guide by Chas. Abel and Dr. Kenneth S. Tydings**
\$1.95

- 143 35mm Photography with an Exakta by Kenneth Allinson**
 Outstanding new text, with many fine photos, illustrating all capabilities of this fine camera. **\$3.00**

- 78 Photography with a Leica by Cash**
 A practical book by a world famous Leica user, on all aspects. New edition. **\$3.75**

74 Leica Manual.

It's a complete, one-volume library on 35mm photography written by 20 outstanding experts in the field for all miniature camera fans. Has 432 absorbing pages, attractively illustrated, bound in hard cloth cover.

\$5.00



- 92 Modern Exakta Guide by Charles Abel and Dr. Kenneth S. Tydings** **\$1.95**

77 Stereo Realist Camera Guide

Usual methods of single lens photography do not apply. Study this book and you can't help get results. **\$1.95**

Guide Books, by W. D. Emanuel

If you own one of these cameras you NEED the guide book for it:

168 Contax	\$1.75	169 Ikonta	\$1.25
140 Leica	1.75	170 Robot	1.25
141 Exakta	1.75	171 Korelle	1.25
145 Rollei	1.75	172 Vito	1.25
142 Retina	1.25		

MOTION PICTURE PHOTOGRAPHY

46 ACL Movie Book

A guide to making better movies, published by Amateur Cinema League. Every owner of a movie camera will want the expert advice given in this book. **\$3.00**

PICTURE BOOKS

- 131 Book of Cats Edited by B. House**
 Over 100 cat photographs, some famous, with apt, chuckle provoking captions. **\$2.00**

PORTRAITURE

- 60 Fred Archer on Portraiture**
 Specific easily understood methods. See yourself where lights go, and why. **\$5.75**

RETOUCHING

- 73 Negative and Print Retouching by Anne J. Anthony**
 Gives practical advice on a difficult subject. **\$5.50**

SPECIAL SUBJECTS, TECHNIQUES AND PROCESSES

- 152 Without Assignment (How to free lance in photography) by Howard Byrne**
 who learned how to sell editors the hard way. "The clarity and completeness of this book make it the best of its kind we have seen."—From review, July Modern Photography. **\$3.95**

- 70 Wall's Dictionary of Photography**
 Seventeenth edition of a 700 page valuable reference book. **\$4.75**

150 Lenses in Photography by Rudolph Kingslake

There's information here for the person who just wants to know what makes a Tessar different from a Dagor; there's also more than enough in the way of formulas and physics for the fellow who wants more than a superficial knowledge of lenses. **\$2.95**

148 Tested Money Making Ideas for Photographers by Charles Abel

Professional photographers will find the business getting, cost cutting ideas in this book very profitable. **\$3.95**

149 Photo Lab Index. 12th Edition

Has world recognition as standard reference book. **\$17.95**

135 Should I Wet My Lips? by Frank Adams

Here's hoping you don't (or do!) recognize yourself in one of over a hundred hilarious cartoon exposures of the "camera fiend." **\$2.50**

81 100 Studies of the Figure by John Rawlings

In compositional variety, photographic technique, and sheer beauty of subject matter and presentation, this book is the best of its kind we've ever seen. All of the pictures were made of a single model, and with very few exceptions only natural light was used both indoors and out. **\$5.50**

129 There's Money in Pictures by Leo Solomon

Know when, where and how to sell your pictures. How to get them to the right editor, at the right time! **\$3.00**

80 Glamour Guide by Eugene Hanson

How to make pretty girl shots that really come off, pitfalls to avoid. **\$5.00**

104 Free Lance Photography by Townsend Godsey

How to make money with a camera. **\$4.00**

136 Photography, Its Materials and Processes by C. B. Neblette

Revised edition of a long selling standard reference work. **\$10.00**

IMPORTANT LATE ARRIVALS

167 Where and How to Sell Your Pictures

A workaday bible for free lance photographers, including over 800 names, addresses and specifications from buyers of photographs; published by Modern Photography. **\$1.50**

166 Rollei Photography by Jacob Deschin

Not a rehash, but a helpful book on the Rollei in use, describing techniques of the top photographers. **\$5.00**

If coupon is clipped send order anyway to Modern's Book Store, 251 4th Ave., New York 10, N. Y.

Modern PHOTOGRAPHY Book Store

251 4th Avenue, New York 10, N. Y.

Amt. Encl. \$

Please send me postpaid the books whose numbers I have circled.

I enclose the amount shown above in ☐ Cash ☐ Money Order ☐ Check.

161	1	127	9	13	84	21	160	39	38	79
76	143	78	74	92	77	168	140	141	145	169
170	171	172	142	46	131	60	73	152	70	150
148	149	135	81	129	80	104	136	167	166	SUB

Name

Address

City

State

1-53 ALL ORDERS ARE SHIPPED POSTPAID No C.O.D.'s. add 3% sales tax with orders for N.Y. City delivery add 25c per title for delivery outside U.S.A., except APO's. If not satisfied, return books to Modern Photography within 5 days and money will be refunded.



Pictures that stand out ARE FLASHED WITH...

Pictures you take at Christmas really stand out . . . because they're packed with sentiment, happy personal memory. They let you relive all the fun of the holiday for years to come . . . the children hanging stockings, opening presents, the tree, friends who call. You capture it all with Sylvania Superflash,* the dependable Blue Dot* bulbs that flash the very instant you need them. Always look for the famous blue dot on the end of each bulb. It identifies the world's most popular flashbulb which features an even-light bulb shape to give you the best light for every picture.

GIFT IDEA! Sleeves of Superflash make wonderful gifts for photo friends. Are good stocking stuffers, too. Get them from your Sylvania dealer today. All types for all cameras and films.



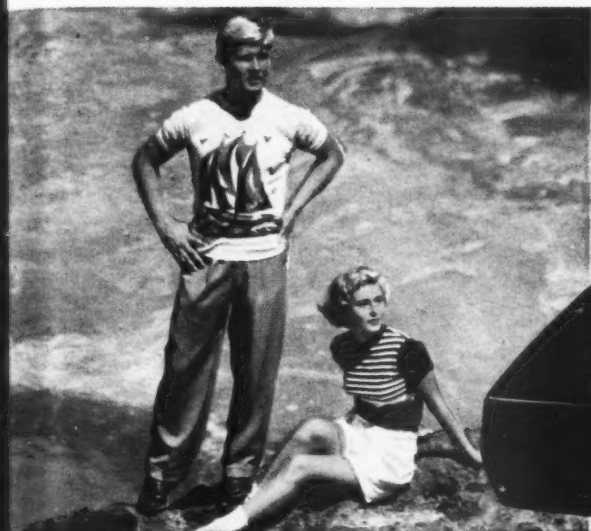
*Sylvania Trademark

SYLVANIA

Sylvania Electric Products Inc.  1740 Broadway, New York 19, N. Y.

PHOTOLAMPS; LIGHT BULBS; RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; FLUORESCENT TUBES; FIXTURES, SIGN TUBING, WIRING DEVICES; TELEVISION SETS

"So lifelike you feel
you're right there
with 3 dimension pictures!"



The sensational Revere 3 Dimension Camera enables you to take amazingly lifelike pictures as easy as pie! Just press the button as you do with any ordinary camera. What you see, you catch in thrilling three dimensions. Everything has shape, form, depth! Full color scenes seem to spring to life with breath-taking 3 dimensional realism. So truly lifelike, viewers exclaim it's like being right there!



See the two lenses? They're perfectly matched and act like your eyes. Simply press the button and they take two separate views of each scene. When viewed, they blend into 3 dimensions. Inexpensive, too! Get 29 stereos from regular 35mm. roll; 20 from special stereo film.



Even beginners get fine results from their first roll, so simple is Revere to operate! Guesswork is eliminated. Even focusing for distance is automatic with the built-in range finder. Too, stereos are now mounted by your film processor and are returned to you ready to show!



Every picture a thrill! Sheer enjoyment when you view stereos through the new Revere Viewer. Advance design brings out the best in every shot. Ask your dealer to show you the new Revere Stereo Camera and Viewer.
REVERE CAMERA COMPANY, CHICAGO 16, ILLINOIS



For a new adventure in photography . . .

Revere³³

STEREO CAMERA



CAMERA—2 matched, coated 35mm f/3.5 REVERE WOLLENSAK AMATON lenses with REVERE WOLLENSAK RAPAX shutters; speeds 1/2 to 1/200; coupled focusing; internal synchro flash; superimposed image range-finder and viewer in camera head; double exposure preventive; single frame provision; level gauge. Inc. fed. tax \$174.50

VIEWER—fine achromatic lenses; both focusing and interocular adjustments; built-in light; 3-color plastic case. \$18.50



What... all this under one tree?

Sure, it's a dream picture. But how well it fits your family's present and future needs!

For Dad, the hobbyist, there's a Kodak Retina IIa Camera—that smart Continental miniature, with ultra-fast $f/2.0$ lens in a nine-speed, $1/500$ to 1-second shutter, coupled range finder, fast lever film-wind... all the refinements. And a handsome Kodaslide Table Viewer, Model A, with the black Day-View Screen that assures brilliant, full-contrast, five-times-enlarged images even in fully lighted rooms. The camera, \$164.10; the viewer, \$97.50.

For your son or daughter at college, the superb Kodak Signet 35 with Kodak Ektar

$f/3.5$ lens—at \$92.50, the greatest of all precision miniature camera values.

For your teen-age youngster... or for Mother, who appreciates uncomplicated efficiency... the Kodak Pony 828 Camera, a capable $f/4.5$ miniature at only \$31.15. And for a neighborhood-sponsored gift to your church or school, the great professional Kodaslide Projector, Master Model, 300- to 1000-watt, blower-cooled, \$169 to \$246 depending on which of four lenses you choose.

And for all—Kodak color films, Kodak color prints. You can do your best Christmas shopping at your Kodak dealer's.

Prices include Federal Tax and are subject to change without notice.

EASTMAN KODAK COMPANY, Rochester 4, N. Y.

Kodak
TRADE-MARK